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&lt;210&gt; 778

&lt;211&gt; 1095

&lt;212&gt; PR7

&lt;213&gt; Homo sapiens

&lt;400&gt; 778

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35 40 45
Thr Lys Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala
50 55 60
Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp
65 70 75 80
Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp
85 90 95
Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser
100 105 110
Cys Asp Thr Asp Ala Glu Ile Leu Tyr Glu Leu Leu Thr Gln His Trp
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His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys
130 135 140
Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile
145 150 155 160
Tyr Ile Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His
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Tyr Gly Leu Thr Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile
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Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp
195 200 205

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Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu  
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 Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro  
 225 230 235 240  
 Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Leu Val Asp Asn  
 245 250 255  
 Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu  
 260 265 270  
 Glu Lys His Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly  
 275 280 285  
 Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Gly Lys Glu Thr Leu  
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 Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Val  
 305 310 315 320  
 Glu Gly Ser Gly Arg Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val  
 325 330 335  
 Glu Asp Ala Pro Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe  
 340 345 350  
 Leu Pro Arg Thr Val Ser Arg Leu Ser Glu Glu Glu Thr Glu Ser Trp  
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 Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val  
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 Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn  
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292

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&lt;210&gt; 779

&lt;211&gt; 3639

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 779

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294

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&lt;210&gt; 780

&lt;211&gt; 1095

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; VARIANT

&lt;222&gt; (1)... (1095)

&lt;223&gt; Xaa - Any Amino Acid

&lt;400&gt; 780

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Val Asn Phe Ile Glu Ala Asn Phe Lys Lys Arg Glu Cys Val Phe Phe
          35          40          45
Thr Lys Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala
          50          55          60
Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp
          65          70          75          80
Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp
          85          90          95
Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser
          100          105          110
Cys Asp Thr Asp Ala Glu Ile Leu Tyr Glu Leu Leu Thr Gln His Trp
          115          120          125
His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys
          130          135          140
Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile
          145          150          155          160
Tyr Ile Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His
          165          170          175
Tyr Gly Leu Met Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile
          180          185          190
Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp
          195          200          205
Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu
          210          215          220
Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro
          225          230          235          240
Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Leu Val Asp Asn
          245          250          255
Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu
          260          265          270
Glu Lys Tyr Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly
          275          280          285
Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Gly Lys Glu Thr Leu
          290          295          300
Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Val

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305					310					315				320	
Glu	Gly	Ser	Gly	Gln	Ile	Ala	Asp	Val	Ile	Ala	Ser	Leu	Val	Glu	Val
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Glu	Asp	Ala	Leu	Thr	Ser	Ser	Ala	Val	Lys	Glu	Lys	Leu	Val	Arg	Phe
			340					345					350		
Leu	Pro	Arg	Thr	Val	Ser	Arg	Leu	Pro	Glu	Glu	Glu	Thr	Glu	Ser	Trp
		355					360					365			
Ile	Lys	Trp	Leu	Lys	Glu	Ile	Leu	Glu	Cys	Ser	His	Leu	Leu	Thr	Val
	370				375						380				
Ile	Lys	Met	Glu	Glu	Ala	Gly	Asp	Glu	Ile	Val	Ser	Asn	Ala	Ile	Ser
	385				390					395					400
Tyr	Ala	Leu	Tyr	Lys	Ala	Phe	Ser	Thr	Ser	Glu	Gln	Asp	Lys	Asp	Asn
			405						410					415	
Trp	Asn	Gly	Gln	Leu	Lys	Leu	Leu	Leu	Glu	Trp	Asn	Gln	Leu	Asp	Leu
		420						425					430		
Ala	Asp	Asp	Glu	Ile	Phe	Thr	Asn	Asp	Arg	Arg	Trp	Glu	Ser	Ala	Asp
		435					440						445		
Leu	Gln	Gln	Val	Met	Phe	Thr	Ala	Leu	Ile	Lys	Asp	Arg	Pro	Lys	Phe
	450				455						460				
Val	Arg	Leu	Phe	Leu	Glu	Asn	Gly	Leu	Asn	Leu	Arg	Lys	Phe	Leu	Thr
	465				470					475					480
His	Asp	Val	Leu	Thr	Glu	Leu	Phe	Ser	Asn	His	Phe	Ser	Thr	Leu	Val
			485						490					495	
Tyr	Arg	Asn	Leu	Gln	Ile	Ala	Lys	Asn	Ser	Tyr	Asn	Asp	Ala	Leu	Leu
		500						505					510		
Thr	Phe	Val	Trp	Lys	Leu	Val	Ala	Asn	Phe	Arg	Arg	Gly	Phe	Arg	Lys
	515						520					525			
Glu	Asp	Arg	Asn	Gly	Arg	Asp	Glu	Met	Asp	Ile	Glu	Leu	His	Asp	Val
	530					535					540				
Ser	Pro	Ile	Thr	Arg	His	Pro	Leu	Gln	Ala	Leu	Phe	Ile	Trp	Ala	Ile
	545				550					555					560
Leu	Gln	Asn	Lys	Lys	Glu	Leu	Ser	Lys	Val	Ile	Trp	Glu	Gln	Thr	Arg
		565							570					575	
Gly	Cys	Thr	Leu	Ala	Ala	Leu	Gly	Ala	Ser	Lys	Leu	Leu	Lys	Thr	Leu
		580					585						590		
Ala	Lys	Val	Lys	Asn	Asp	Ile	Asn	Ala	Ala	Gly	Glu	Ser	Gln	Glu	Leu
	595						600					605			
Ala	Asn	Glu	Tyr	Glu	Thr	Arg	Ala	Val	Glu	Leu	Phe	Thr	Gln	Cys	Tyr
	610					615					620				
Ser	Ser	Asp	Glu	Asp	Leu	Ala	Glu	Gln	Leu	Leu	Val	Tyr	Ser	Cys	Glu
	625				630					635					640
Ala	Trp	Gly	Gly	Ser	Asn	Cys	Leu	Glu	Leu	Ala	Val	Glu	Ala	Thr	Asp
		645							650					655	
Gln	His	Phe	Ile	Ala	Gln	Pro									

296

770		775		780
Phe Thr Asp Leu Trp Asn Val Met Asp Thr Leu Gly Leu Phe Tyr Phe				
783		790		795
Ile Ala Gly Ile Val Phe Arg Leu His Ser Ser Asn Lys Ser Ser Leu				800
	805		810	815
Tyr Ser Gly Arg Val Ile Phe Cys Leu Asp Tyr Ile Ile Phe Thr Leu				
	820		825	830
Arg Leu Ile His Ile Phe Thr Val Ser Arg Asn Leu Gly Pro Lys Ile				
	835		840	845
Ile Met Leu Gln Arg Met Leu Ile Asp Val Phe Phe Phe Leu Phe Leu				
	850		855	860
Phe Ala Xaa Trp Met Val Ala Phe Gly Val Ala Arg Gln Gly Ile Leu				
	865		870	875
Arg Gln Asn Gln Gln Arg Trp Arg Trp Ile Phe Arg Ser Val Ile Tyr				
	885		890	895
Gln Pro Tyr Leu Ala Met Phe Gly Gln Val Pro Ser Asp Val Asp Gly				
	900		905	910
Thr Thr Tyr Asp Phe Ala His Cys Thr Phe Thr Gly Asn Gln Ser Lys				
	915		920	925
Pro Leu Cys Val Gln Leu Asp Gln His Asn Leu Pro Arg Phe Pro Gln				
	930		935	940
Trp Ile Thr Ile Pro Leu Val Cys Ile Tyr Met Leu Ser Thr Asn Ile				
	945		950	955
Leu Leu Val Asn Leu Leu Val Ala Met Phe Gly Tyr Thr Val Gly Thr				
	965		970	975
Val Gln Gln Asn Asn Asp Gln Val Trp Lys Phe Gln Arg Tyr Phe Leu				
	980		985	990
Val Gln Gln Tyr Cys Ser Arg Leu Asn Ile Pro Phe Pro Phe Ile Val				
	995		1000	1005
Phe Ala Tyr Phe Tyr Met Val Val Lys Lys Cys Phe Lys Cys Cys Cys				
	1010		1015	1020
Lys Gln Lys Asn Met Gln Ser Ser Val Cys Cys Phe Lys Asn Gln Asp				
	1025		1030	1035
Asn Gln Thr Leu Ala Trp Gln Gly Val Met Lys Gln Asn Tyr Leu Val				
	1040		1045	1050
Lys Ile Asn Thr Lys Ala Asn Asp Thr Ser Gln Gln Met Arg His Arg				
	1055		1060	1065
Phe Arg Gln Leu Asp Thr Lys Leu Asn Asp Leu Lys Gly Leu Leu Lys				
	1070		1075	1080
Gln Ile Ala Asn Lys Ile Lys				1085
	1090		1095	

&lt;210&gt; 781

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 781

Arg Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser
5 10 15

&lt;210&gt; 782

&lt;211&gt; 45

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 782



agaatgects ccgtgctgca gtgcgtgaac gtgtcgggtgg tgtct 45

<210> 783

<211> 45

<212> DNA

<213> Homo sapiens

<400> 783

gagccagggg gccagatggt ggaggccagc ctctccgtac ggcac 45

<210> 784

<211> 45

<212> DNA

<213> Homo sapiens

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gaggccgacc sagagccagg gagccagatg gtggaggcca gctc 45

<210> 785

<211> 45

<212> DNA

<213> Homo sapiens

<400> 785

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<210> 786

<211> 45

<212> DNA

<213> Homo sapiens

<400> 786

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<210> 787

<211> 42

<212> DNA

<213> Homo sapiens

<400> 787

tccagaact cctacacct cgggtgggc ctgcacagtc tt 42

<210> 788

<211> 45

<212> DNA

<213> Homo sapiens

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<210> 789

<211> 45

<212> DNA

<213> Homo sapiens

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298

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<210> 791  
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<212> DNA  
<213> Homo sapiens

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<210> 792  
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<400> 795  
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<210> 797

299

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<400> 798  
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<210> 800  
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 <212> PRT  
 <213> Homo sapiens

<400> 800  
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<210> 801  
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 <212> PRT  
 <213> Homo sapiens

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 Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met  
                   5                  10                  15

<210> 802  
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 <212> PRT  
 <213> Homo sapiens

<400> 802  
 Tyr Thr Ile Gly Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu  
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<210> 803  
 <211> 14  
 <212> PRT

300

&lt;213&gt; Homo sapiens

&lt;400&gt; 803

Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly Leu His Ser Leu  
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&lt;210&gt; 804

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 804

Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu  
                                   5                                  10                                  15

&lt;210&gt; 805

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 805

His Pro Gln Trp Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser  
                                   5                                  10                                  15

&lt;210&gt; 806

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 806

Ser Gly Val Leu Val His Pro Gln Trp Val Leu Ser Ala Ala His  
                                   5                                  10                                  15

&lt;210&gt; 807

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 807

Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp Val  
                                   5                                  10                                  15

&lt;210&gt; 808

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 808

Ala Leu Val Met Gln Asn Glu Leu Phe Cys Ser Gly Val Leu Val  
                                   5                                  10                                  15

&lt;210&gt; 809

301

<211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 809  
 Ser Gln Pro Trp Gln Ala Ala Leu Val Met Gln Asn Glu Leu Phe Cys  
                   5                  10                  15

Ser

<210> 810  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 810  
 Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly Asn Ser Cys Leu  
                   5                  10                  15

<210> 811  
 <211> 15  
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 <213> Homo sapiens

<400> 811  
 Ser Val Ser Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser  
                   5                  10                  15

<210> 812  
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 <213> Homo sapiens

<400> 812  
 Ile Lys Leu Asp Glu Ser Val Ser Glu Ser Asp Thr Ile Arg Ser  
                   5                  10                  15

<210> 813  
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 <212> PRT  
 <213> Homo sapiens

<400> 813  
 Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser  
                   5                  10                  15

<210> 814  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 814



303

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 aacttcogaa gaggtctcog gaaggaagac agaatggcc gggacgagat ggacatagaa 1620  
 ctccacgagc tgtctctat tactcggcac cccctgcag ctctcttcat ctggggccatt 1680  
 ctccagaata agaaggaact ctccaaagtc atttgggagc agaccsgggg ctgcactctg 1740  
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 gttgctgggg agtcagagga gctggctaag gactacgaga cccgggtgtg tgagctgttc 1860  
 actgagtgtt acagcagcga tgaagacttg gcagacagc tgtgtgtata ttctgtgaa 1920  
 gcttggggtg gactcagaca ccaccaccac caccactga 1959

&lt;218&gt; 818

&lt;211&gt; 652

&lt;212&gt; FRT

&lt;213&gt; Homo sapiens

&lt;408&gt; 818

Met	Arg	Asn	Arg	Arg	Asn	Asp	Thr	Leu	Asp	Ser	Thr	Arg	Thr	Leu	Tyr
				5					10					15	
Ser	Ser	Ala	Ser	Arg	Ser	Thr	Asp	Leu	Ser	Tyr	Ser	Glu	Ser	Asp	Leu
			20					25					30		
Val	Asn	Phe	Ile	Gln	Ala	Asn	Phe	Lys	Lys	Arg	Glu	Cys	Val	Phe	Phe
		35					40					45			
Thr	Lys	Asp	Ser	Lys	Ala	Thr	Glu	Asn	Val	Cys	Lys	Cys	Gly	Tyr	Ala
	50					55					60				
Gln	Ser	Gln	His	Met	Glu	Gly	Thr	Gln	Ile	Asn	Gln	Ser	Glu	Lys	Trp
	65				70					75				80	
Asn	Tyr	Lys	Lys	His	Thr	Lys	Glu	Phe	Pro	Thr	Asp	Ala	Phe	Gly	Asp
			85					90					95		
Ile	Gln	Phe	Glu	Thr	Leu	Gly	Lys	Lys	Gly	Lys	Tyr	Ile	Arg	Leu	Ser
		100						105					110		
Cys	Asp	Thr	Asp	Ala	Glu	Ile	Leu	Tyr	Glu	Leu	Leu	Thr	Gln	His	Trp
		115					120					125			
His	Leu	Lys	Thr	Pro	Asn	Leu	Val	Ile	Ser	Val	Thr	Gly	Gly	Ala	Lys
	130					135					140				
Asn	Phe	Ala	Leu	Lys	Pro	Arg	Met	Arg	Lys	Ile	Phe	Ser	Arg	Leu	Ile
	145				150					155				160	
Tyr	Ile	Ala	Gln	Ser	Lys	Gly	Ala	Trp	Ile	Leu	Thr	Gly	Gly	Thr	His
			165					170						175	
Tyr	Gly	Leu	Met	Lys	Tyr	Ile	Gly	Glu	Val	Val	Arg	Asp	Asn	Thr	Ile
		180					185					190			
Ser	Arg	Ser	Ser	Glu	Glu	Asn	Ile	Val	Ala	Ile	Gly	Ile	Ala	Ala	Trp
	195					200					205				
Gly	Met	Val	Ser	Asn	Arg	Asp	Thr	Leu	Ile	Arg	Asn	Cys	Asp	Ala	Glu
	210					215					220				
Gly	Tyr	Phe	Leu	Ala	Gln	Tyr	Leu	Met	Asp	Asp	Phe	Thr	Arg	Asp	Pro
	225				230					235				240	
Leu	Tyr	Ile	Leu	Asp	Asn	Asn	His	Thr	His	Leu	Leu	Leu	Val	Asp	Asn
			245						250					255	
Gly	Cys	His	Gly	His	Pro	Thr	Val	Glu	Ala	Lys	Leu	Arg	Asn	Gln	Leu
		260					265					270			
Glu	Lys	Tyr	Ile	Ser	Gln	Arg	Thr	Ile	Gln	Asp	Ser	Asn	Tyr	Gly	Gly
	275					280					285				
Lys	Ile	Pro	Ile	Val	Cys	Phe	Ala	Gln	Gly	Gly	Gly	Lys	Gln	Thr	Leu
	290					295					300				
Lys	Ala	Ile	Asn	Thr	Ser	Ile	Lys	Asn	Lys	Ile	Pro	Cys	Val	Val	Val
	305				310					315				320	
Glu	Gly	Ser	Gly	Gln	Ile	Ala	Asp	Val	Ile	Ala	Ser	Leu	Val	Gln	Val
			325						330					335	
Glu	Asp	Ala	Leu	Thr	Ser	Ser	Ala	Val	Lys	Glu	Lys	Leu	Val	Arg	Phe

304

340	345	350
Leu Pro Arg Thr Val Ser Arg Leu Pro Glu Glu Glu Thr Glu Ser Trp		
355	360	365
Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val		
370	375	380
Ile Lys Met Glu Glu Ala Glu Gly Asp Glu Ile Val Ser Asn Ala Ile Ser		
385	390	395
Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn		
405	410	415
Trp Asn Gly Gln Leu Lys Leu Leu Leu Glu Trp Asn Gln Leu Asp Leu		
420	425	430
Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp		
435	440	445
Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe		
450	455	460
Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr		
465	470	475
His Asp Val Leu Thr Glu Leu Phe Ser Asn His Phe Ser Thr Leu Val		
485	490	495
Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu		
500	505	510
Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly Phe Arg Lys		
515	520	525
Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val		
530	535	540
Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile		
545	550	555
Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg		
565	570	575
Gly Cys Thr Leu Ala Ala Leu Gly Ala Ser Lys Leu Leu Lys Thr Leu		
580	585	590
Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu		
595	600	605
Ala Asn Glu Tyr Glu Thr Arg Ala Val Glu Leu Phe Thr Glu Cys Tyr		
610	615	620
Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu		
625	630	635
Ala Trp Gly Gly Leu Glu His His His His His His		
645	650	

&lt;210&gt; 919

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 919

Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe	
1	15
Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile Arg Ser	
20	35
Gly Gly Gly Ser Pro Thr Val His Ile Gly Pro Thr Ala Phe Leu Gly	
35	45
Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val	
50	60
Val Gly Ser Ala Pro His Ala Ser Leu Gly Ile Ser Thr Gly Asp Val	
65	80
Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala	



305

	83		90		95										
Asp	Ala	Leu	Asn	Gly	His	His	Pro	Gly	Asp	Val	Ile	Ser	Val	Asn	Trp
	100				105					110					
Gln	Thr	Lys	Ser	Gly	Gly	Thr	Arg	Thr	Gly	Asn	Val	Thr	Leu	Ala	Glu
	115				120					125					
Gly	Pro	Pro	Ala												
	130														

<210> 820  
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 <213> Artificial Sequence

<220>  
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<210> 821  
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 accgttcata tggggcctac cgccttcttc ggcttgggtg ttgtcgacaa caacggcaac 180  
 ggcgcacggg tccaacgggt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240  
 ggcgaactga tccacggcgt cgaaggcgtt cagatcaact cggccaccgc gatggcggac 300  
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 ggcacgcgtg cagggaacgt gacattggcc gagggaaccc cggccgaatt catgatccgg 420  
 gagaatttg cccactgcac cgtgctaacc attgcacac gattgaacc cattattgac 480  
 agcgacaaga taatggtttt agattcagga agactgaag aatatgatga gccgtatgtt 540  
 ttgctgcata ataaagagag cctattttac aagatgggtc aacaactggg caaggcagaa 600  
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 gtctcaact cctga 675

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 <211> 291  
 <212> DNA  
 <213> Homo sapiens

306

&lt;400&gt; 823

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accattattg acagcgacaa gataatgggt ttagattcag gaagactgaa agaatatgat 120
gagccgtatg ttttqctgca aaataaagag agcctatattt acaagatggt gcaacacctg 180
ggcaaggcag aagccgctgc cctcaactgaa acagcaaaac agagatgggg tttcaccatg 240
ttggccaggc tggctcaca ctcctctcag ccccccacc accaccactg a 291

```

&lt;210&gt; 824

&lt;211&gt; 1074

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 824

```

atgtcagcca ttgagagggt gtcagaggca atcgtcagaa tcgaagaat ccagaccttt 60
ttgctacttg atgagatata acagcgcaac cgtcagctgc cgtcagatgg taaaaagatg 120
gtgcatgtgc aggatattac tgccttttgg gataaggcat cagagacccc aactctacaa 180
ggcctttcct ttactgtcag acctggcgaa ttgttagctg tggtcggccc cgtgggagca 240
gggaagtcac cactgttaag tgcctgtctc ggggaattgg ccccaagtca cgggctggtc 300
agcgtgcatg gaagaattgc ctatgtgtct cagcagccct ggggtgtctc ggggaactctg 360
aggagtaata ttttatttgg gaagaaatac gaaaaggaa gatatgaaaa agtcataaag 420
gcttgtgtctc tgaaaaaagga tttaacagctg ttggaggatg gtgatctgac tgtgatagga 480
gatcggggaa ccacgctgag tggaggggcag aaagcacggg taaaccttgc aagagcagtg 540
tatcaagatg ctgacateta tctcctggac gatcctctca gtgcagtaga tgcgggaagt 600
agcagacact tgttcgaact gtgtatttgt caaatitttc atgagaagat cacaatttta 660
gtgactcacc agttgcagta cctcaaaagt gaaagtcaga ttctgatatt gaagatgggt 720
aaaatggtgc agaaggggac ttacactgag ttcttaaat ctggataga ttttggctcc 780
cttttaaaaga aggataatga ggaagtgaa caacctccag ttccaggaac tcccacacta 840
aggaatcgta ccttctcaga gtcttcgggt tgggtctcaac aatcttctag accctcttg 900
aaagatgggt ctctggagag ccaagataca gagaatgtcc cagttacact atcagaggag 960
aaccgttctg aagyaaaagt tggttttcag gctataaga attacttcag agctgggtgt 1020
cactggattg tcttcatttt ccttattctc gaggaccacc accaccacca ctga 1074

```

&lt;210&gt; 825

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 825

```

Met His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
      5              10              15
Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
      20              25              30
Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
      35              40              45
Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
      50              55              60
Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
      65              70              75              80
Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
      85              90              95
Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
      100             105             110
Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
      115             120             125
Leu Ala Glu Gly Pro Pro Ala Glu Phe Met Ile Arg Glu Lys Phe Ala
      130             135             140
His Cys Thr Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp

```

307

145				150				155			160
Ser	Asp	Lys	Ile	Met	Val	Leu	Asp	Ser	Gly	Arg	Leu
				165					170		
Glu	Pro	Tyr	Val	Leu	Leu	Gln	Asn	Lys	Glu	Ser	Leu
			180					185			
Val	Gln	Gln	Leu	Gly	Lys	Ala	Glu	Ala	Ala	Ala	Leu
			195				200				205
Lys	Gln	Arg	Trp	Gly	Phe	Thr	Met	Leu	Ala	Arg	Leu
			210			215					220

&lt;210&gt; 826

&lt;211&gt; 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 826

Met	Ser	Ala	Ile	Glu	Arg	Val	Ser	Glu	Ala	Ile	Val	Ser	Ile	Arg	Arg
				5				10						15	
Ile	Gln	Thr	Phe	Leu	Leu	Leu	Asp	Glu	Ile	Ser	Gln	Arg	Asn	Arg	Gln
			20					25					30		
Leu	Pro	Ser	Asp	Gly	Lys	Lys	Met	Val	His	Val	Gln	Asp	Phe	Thr	Ala
			35				40					45			
Phe	Trp	Asp	Lys	Ala	Ser	Glu	Thr	Pro	Thr	Leu	Gln	Gly	Leu	Ser	Phe
			50			55					60				
Thr	Val	Arg	Pro	Gly	Glu	Leu	Leu	Ala	Val	Val	Gly	Pro	Val	Gly	Ala
			65		70				75					80	
Gly	Lys	Ser	Ser	Leu	Leu	Ser	Ala	Val	Leu	Gly	Gln	Leu	Ala	Pro	Ser
			85					90					95		
His	Gly	Leu	Val	Ser	Val	His	Gly	Arg	Ile	Ala	Tyr	Val	Ser	Gln	Gln
			100					105					110		
Pro	Trp	Val	Phe	Ser	Gly	Thr	Leu	Arg	Ser	Asn	Ile	Leu	Phe	Gly	Lys
			115				120					125			
Lys	Tyr	Gln	Lys	Glu	Arg	Tyr	Glu	Lys	Val	Ile	Lys	Ala	Cys	Ala	Leu
			130			135					140				
Lys	Lys	Asp	Leu	Gln	Leu	Leu	Glu	Asp	Gly	Asp	Leu	Thr	Val	Ile	Gly
			145			150				155				160	
Asp	Arg	Gly	Thr	Thr	Leu	Ser	Gly	Gly	Gln	Lys	Ala	Arg	Val	Asn	Leu
			165					170						175	
Ala	Arg	Ala	Val	Tyr	Gln	Asp	Ala	Asp	Ile	Tyr	Leu	Leu	Asp	Asp	Pro
			180					185					190		
Leu	Ser	Ala	Val	Asp	Ala	Gln	Val	Ser	Arg	His	Leu	Phe	Glu	Leu	Cys
			195				200				205				
Ile	Cys	Gln	Ile	Leu	His	Glu	Lys	Ile	Thr	Ile	Leu	Val	Thr	His	Gln
			210			215					220				
Leu	Gln	Tyr	Leu	Lys	Ala	Ala	Ser	Gln	Ile	Leu	Ile	Leu	Lys	Asp	Gly
			225			230				235				240	
Lys	Met	Val	Gln	Lys	Gly	Thr	Tyr	Thr	Glu	Phe	Leu	Lys	Ser	Gly	Ile
			245					250					255		
Asp	Phe	Gly	Ser	Leu	Leu	Lys	Lys	Asp	Asn	Glu	Gln	Ser	Gln	Gln	Pro
			260					265					270		
Pro	Val	Pro	Gly	Thr	Pro	Thr	Leu	Arg	Asn	Arg	Thr	Phe	Ser	Glu	Ser
			275				280					285			
Ser	Val	Trp	Ser	Gln	Gln	Ser	Ser	Arg	Pro	Ser	Leu	Lys	Asp	Gly	Ala
			290			295					300				
Leu	Glu	Ser	Gln	Asp	Thr	Glu	Asn	Val	Pro	Val	Thr	Leu	Ser	Glu	Glu
			305			310				315				320	
Asn	Arg	Ser	Glu	Gly	Lys	Val	Gly	Phe	Gln	Ala	Tyr	Lys	Asn	Tyr	Phe

308

				325					330				335
Arg	Ala	Gly	Asp	His	Trp	Ile	Val	Phe	Ile	Phe	Leu	Ile	Leu
				340				345					350
His	Met	His	His										
				355									

```

<210> 627
<211> 96
<212> PRT
<213> Homo sapiens

```

```

<400> B27
Met Gly Ile Arg Glu Lys Phe Ala His Cys Thr Val Leu Thr Ile Ala
      5              10              15
His Arg Leu Asn Thr Ile Ile Asp Ser Asp Lys Ile Met Val Leu Asp
      20              25              30
Ser Gly Arg Leu Lys Glu Tyr Asp Glu Pro Tyr Val Leu Leu Gln Asn
      35              40              45
Lys Glu Ser Leu Phe Tyr Lys Met Val Gln Gln Leu Gly Lys Ala Glu
      50              55              60
Ala Ala Ala Leu Thr Glu Thr Ala Lys Gln Arg Trp Gly Phe Thr Met
      65              70              75              80
Leu Ala Arg Leu Val Ser Asn Ser Leu Glu His His His His His
      85              90              95

```

```
<210> 828  
<211> 36  
<212> D8A  
<213> AATTGTTCTGGT GATGTGGGG
```

1229 PCF 011081

[illegible]

```
<210> 829
<211> 35
<212> DNA
<213> Artificial Sequence
```

```

<220>
<223> PCR primer

```

<400> 829  
 ccgcctcgagg gaggtttgaga ccagcctggc caaca 86

<210> 838  
<211> 38  
<212> DNA  
<213> Artificial Sequence

<223> PCR primer

<400> 430

309

gcctggacca tatgtcagcc attgagaggg tgtcagag

36

&lt;210&gt; 831

&lt;211&gt; 34

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 831

ccgtctcgaga ataaggaasa tgaagacaat ccag

34

&lt;210&gt; 832

&lt;211&gt; 27

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 832

gttgaattca tgcacggggc ccaggtg

27

&lt;210&gt; 833

&lt;211&gt; 30

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 833

cccctcgagt cactatgggc tgcctcttga

30

&lt;210&gt; 834

&lt;211&gt; 815

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 834

atgcacaccc atcaccatca acaggccggcg tccgataact tccagctgtc ccaggggtggg 60  
 cagggatctcg ccattccgat cgggcaggcg atggcgatcg cgggcacgat caagcttccc 120  
 accgttcata tggggcctac cgccttcttc ggccttgggtg ttgtcgacaa caacggcaac 180  
 ggcgcacgag tccaaagcgt gtcaggagc gctccggcgg caagtctcgg catctccacc 240  
 gggcagctga tcaccgggtt cgaaggcgct ccgatcaact cggccacccc gatggcggac 300  
 gcgcttaacg ggcacatccc cgtgacgtc atctcggtag cctggcaaac caagtggggc 360  
 ggcacggcta cagggaacgt gacattggcc gagggacccc cggccgaatt catgcacggg 420  
 cccaggtgac tggcaagctg ctccaggtgt gcttgctctg ccttggctgc cactctctgc 480  
 ggggtgctgc tggagggggg ggaacggcca ccaaccttac ccagtcacgg aagtggatgg 540  
 ccattttccc acagcctgag tggctgccac ctgatggctg atggagcaca ggccttagga 600  
 aaagcagatg gcccttggcc ctactttttt gttagaagaa ctgatgttcc atgtcctgca 660  
 ggcagtgagg ttggtggtg tgcctccagc tccctggcgg ccttcgcaga ggtgactggt 720  
 tgccttttgg gccctottgg ccttgcccag catgcacaag cctcagtgt actactgtgc 780

## 310

tacaaatgga gccatatagg ggaacagagc agccatctca ggagcaaggc gtatgctgcc 840  
 ttggggggt ccagtccttg cctcaagggt cttatgtcac tgtgggcttc ttggtgtca 900  
 agagccagac catag 915

<210> 835

<211> 304

<212> PRT

<213> Homo sapiens

<400> 835

Met His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu  
                   5                  10                  15  
 Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala  
                   20                  25                  30  
 Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala  
                   35                  40                  45  
 Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val  
                   50                  55                  60  
 Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr  
                   65                  70                  75                  80  
 Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr  
                   85                  90                  95  
 Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser  
                   100                  105                  110  
 Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr  
                   115                  120                  125  
 Leu Ala Gln Gly Pro Pro Ala Glu Phe Met His Gly Pro Gln Val Leu  
                   130                  135                  140  
 Ala Arg Cys Ser Gln Cys Ala Cys Pro Ala Leu Ala Ala Thr Ser Ala  
                   145                  150                  155                  160  
 Gly Val Arg Leu Gln Gly Val Asp Arg Pro Pro Thr Leu Pro Ser Gln  
                   165                  170                  175  
 Gly Ser Gly Trp Pro Cys Ser His Ser Leu Ser Gly Cys His Leu Met  
                   180                  185                  190  
 Ala Asp Gly Ala Lys Ala Leu Gly Lys Ala Asp Gly Pro Trp Pro Tyr  
                   195                  200                  205  
 Leu Phe Val Arg Arg Thr Asp Val Pro Cys Pro Ala Ala Ser Glu Val  
                   210                  215                  220  
 Gly Gly Cys Ala Pro Ser Ser Trp Arg Ala Leu Ala Gln Val Thr Gly  
                   225                  230                  235                  240  
 Cys Ser Leu Gly Pro Leu Gly Leu Ala Gln His Ala Gln Ala Ser Val  
                   245                  250                  255  
 Leu Leu Leu Cys Tyr Lys Trp Ser His Ile Gly Gln Thr Ser Ser His  
                   260                  265                  270  
 Leu Arg Ser Lys Val Tyr Ala Ala Phe Gly Gly Ser Ser Pro Cys Leu  
                   275                  280                  285  
 Lys Gly Leu Met Ser Leu Trp Ala Ser Trp Leu Ser Arg Gly Arg Pro  
                   290                  295                  300

<210> 836

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 836

311

cgaagtcacg tggaggccag cctc

24

&lt;210&gt; 837

&lt;211&gt; 29

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;221&gt; PCR primer

&lt;400&gt; 837

cctgaccgaa ttcattaact ggccctggac

29

&lt;210&gt; 838

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; VARIANT

&lt;222&gt; (1)...(166)

&lt;223&gt; Xaa = Any Amino Acid

&lt;400&gt; 838

Met	Gly	His	His	His	His	His	His	Val	Glu	Ala	Ser	Leu	Ser	Val	Arg
1				5					10					15	
His	Pro	Glu	Tyr	Asn	Arg	Pro	Leu	Leu	Ala	Asn	Asp	Leu	Met	Leu	Ile
		20					25					30			
Lys	Leu	Asp	Glu	Ser	Val	Ser	Glu	Ser	Asp	Thr	Ile	Arg	Ser	Ile	Ser
		35					40					45			
Ile	Ala	Ser	Gln	Cys	Pro	Thr	Ala	Gly	Asn	Ser	Cys	Leu	Val	Ser	Gly
	50					55				60					
Trp	Gly	Leu	Leu	Ala	Asn	Gly	Arg	Met	Pro	Thr	Val	Leu	Gln	Cys	Val
65					70				75					80	
Asn	Val	Ser	Val	Val	Ser	Glu	Glu	Val	Cys	Ser	Lys	Leu	Tyr	Asp	Pro
			85						90					95	
Leu	Tyr	His	Pro	Ser	Met	Phe	Cys	Ala	Gly	Gly	Gly	Gln	Xaa	Gln	Xaa
		100						105				110			
Asp	Ser	Cys	Asn	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Ile	Cys	Asn	Gly	Tyr
		115					120					125			
Leu	Gln	Gly	Leu	Val	Ser	Phe	Gly	Lys	Ala	Pro	Cys	Gly	Gln	Val	Gly
	130					135					140				
Val	Pro	Gly	Val	Tyr	Thr	Asn	Leu	Cys	Lys	Phe	Thr	Glu	Trp	Ile	Glu
145					150					155					160
Lys	Thr	Val	Gln	Ala	Ser										
				165											

&lt;210&gt; 839

&lt;211&gt; 504

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1)...(504)

&lt;223&gt; n = A,T,C or G

312

<400> 839  
 atggggccatc atcatcatca tcaagtggag gccagcctct ccgtacggca ccagaggtac 60  
 aacagaccct tgcctcgtaa cgaacctatg ctcatcaagt tggacgaatc cgtgtccgag 120  
 tctgacacca tccggagcat cagcattgct togcagtgc ctaccgggg gaactcttgc 180  
 ctggtttctg gctggggtct gctggcgaa gcgagaatgc ctaccgtgct gcagtgcgtg 240  
 aacgtgtcgg tgggtgtctg ggaggtctgc agtaagctct atgacccgct gtaccacccc 300  
 agcatgttct ggcgcggcgg agggcaanac cagaangact cctgcaacgg tgactctggg 360  
 gggccctctg tctgcaacgg gtacttgcat ggccttgtgt ctttcggaaa agccccgtgt 420  
 ggcacgttg gcgtgccagg tgtctacac aacctctgca aattcactga gtggatagag 480  
 aaaacccgtcc aggccagtta atga 504

<210> 840  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 840  
 ctcagggttc cggagccgag g 21

<210> 841  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 841  
 ctatagaatt cattaccaaa aagctgggct ccagc 35

<210> 842  
 <211> 241  
 <212> ERT  
 <213> Homo sapiens

<400> 842  
 Met Gln His His His His His His Leu Arg Val Pro Glu Pro Arg Pro  
 1 5 10 15  
 Gly Gln Ala Lys Ala Glu Gly Ala Ala Pro Pro Thr Pro Ser Lys Pro  
 20 25 30  
 Leu Thr Ser Phe Leu Ile Gln Asp Ile Leu Arg Asp Gly Ala Gln Arg  
 35 40 45  
 Gln Gly Gly Arg Thr Ser Ser Gln Arg Gln Arg Asp Pro Glu Pro Glu  
 50 55 60  
 Pro Glu Pro Glu Pro Glu Gly Gly Arg Ser Arg Ala Gly Ala Gln Asn  
 65 70 75 80  
 Asp Gln Leu Ser Thr Gly Pro Arg Ala Ala Pro Glu Glu Ala Gln Thr  
 85 90 95  
 Leu Ala Glu Thr Glu Pro Glu Arg His Leu Gly Ser Tyr Leu Leu Asp  
 100 105 110  
 Ser Gln Asn Thr Ser Gly Ala Leu Pro Arg Leu Pro Gln Thr Pro Lys  
 115 120 125



313

Gln Pro Gln Lys Arg Ser Arg Ala Ala Phe Ser His Thr Gln Val Ile  
 130 135 140  
 Glu Leu Glu Arg Lys Phe Ser His Gln Lys Tyr Leu Ser Ala Pro Glu  
 145 150 155 160  
 Arg Ala His Leu Ala Lys Asn Leu Lys Leu Thr Glu Thr Gln Val Lys  
 165 170 175  
 Ile Trp Phe Gln Asn Arg Arg Tyr Lys Thr Lys Arg Lys Gln Leu Ser  
 180 185 190  
 Ser Glu Leu Gly Asp Leu Glu Lys His Ser Ser Leu Pro Ala Leu Lys  
 195 200 205  
 Glu Glu Ala Phe Ser Arg Ala Ser Leu Val Ser Val Tyr Asn Ser Tyr  
 210 215 220  
 Pro Tyr Tyr Pro Tyr Leu Tyr Cys Val Gly Ser Trp Ser Pro Ala Phe  
 225 230 235 240  
 Trp

&lt;210&gt; 843

&lt;211&gt; 729

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 843

```

atgcagcatc accaccatca ccacctcagg gtcccgagag cgcggcccgq ggaggcgaaa      60
gaggaggggg cgcgcgcgcg gaccccgctc aagccgctca cgtccttct catccaggac      120
atcctgcggg acggcgcgca gggcgaaggc ggcgcgacga gcagccagag acagcgcgac      180
cgggagcccg agccagagcc agagccagag ggaggacgca gccgcgcgq ggcgcgagac      240
gaaccagctga gcaccgggac cgcgcgcgq ccgatgagg ccgagacgt ggcagagacc      300
gagccagaaa ggcacttggg gtcttatctg ttggactctg aaacacctc aggcgcctt      360
ccaaggcttc cccaaccac taagcagccg cagaagcgt ccgagctgc ctcttccac      420
actcaggtga tcgagttgga gaggaagttc agccatcaga agtacctgc ggcacctgaa      480
cgggccacc tggccagaa cctcaagctc aaggagacc aagtgaagat atggttcag      540
aacagacgtc ataagactaa gcgaaagcag ctctctctgg agctgggaga cttggagag      600
cactctttt tgcggccct gaagagagg gacttctccc gggcctccct ggtctccgtg      660
tataacagct atcttacta ccatacctg cactgcgtgg gcagctggag ccagctttt      720
tggtaatga                                     729

```

&lt;210&gt; 844

&lt;211&gt; 27

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 844

ctactaagcg ctggagtgag ggtacag

27

&lt;210&gt; 845

&lt;211&gt; 33

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

314

<400> 845  
catcgagaat tcaactactct ctgactagat gtc

33

<210> 846  
<211> 161  
<212> PRT  
<213> Homo sapiens

<400> 846  
Met Gln His His His His His His Ala Gly Val Arg Asp Gln Gly Gln  
1 5 10 15  
Gly Ala Arg Trp Pro His Thr Gly Lys Arg Gly Pro Leu Leu Gln Gly  
20 25 30  
Leu Thr Trp Ala Thr Gly Gly His Cys Phe Ser Ser Glu Glu Ser Gly  
35 40 45  
Ala Val Asp Gly Ala Gly Gln Lys Lys Asp Arg Ala Trp Leu Arg Cys  
50 55 60  
Pro Glu Ala Val Ala Gly Phe Pro Leu Gly Ser Asp Cys Arg Glu Gly  
65 70 75 80  
Gly Arg Gln Gly Cys Gly Gly Ser Asp Asp Glu Asp Asp Leu Gly Val  
85 90 95  
Ala Pro Gly Leu Ala Pro Ala Trp Ala Leu Thr Gln Pro Pro Ser Gln  
100 105 110  
Ser Pro Gly Pro Gln Ser Leu Pro Ser Thr Pro Ser Ser Ile Trp Pro  
115 120 125  
Glu Trp Val Ile Leu Ile Thr Glu Leu Thr Ile Pro Ser Pro Ala His  
130 135 140  
Gly Pro Pro Trp Leu Pro Asn Ala Leu Glu Arg Gly His Leu Val Arg  
145 150 155 160  
Glu

<210> 847  
<211> 489  
<212> DNA  
<213> Homo sapiens

<400> 847  
atgcagcacc accaccatca ccacgctgga gtcagggaac aggggcaggg cgcgagatgg 60  
cctcacacag ggaagagagg gccctcctg cagggcctca cctgggccac aggaggacac 120  
tgcttttctt ctgaggagtc aggagctgtg gatggtgtct gacagaagaa ggcaggggac 180  
tggctcaggt gtccagaggc tgteqctgga ttccctttgg gatcagactg cagggaggga 240  
ggscggcagg gtgtgtgggg gactgacgat gaggatgacc tgggggtggc tccaggcctt 300  
gcccttgctt gggccctcac ccagcctccc tcacagtctc ctggccctca gtctctccc 360  
tccactccat cctccatctg gccctagctg gtcattctga tcaactgaact gaccataccc 420  
agccttgccc acggccctcc atggtctccc satgcccctg agaggggaca tctagtccga 480  
gagtgtga 489

<210> 848  
<211> 132  
<212> PRT  
<213> Homo sapiens

<400> 848  
Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe

315

1	5	10	15
Ala Ile Pro Ile Gly Gln Ala Met	Ala Ile Ala Gly Gln Ile Arg Ser		
20	25	30	
Gly Gly Gly Ser Pro Thr Val His	Ile Gly Pro Thr Ala Phe Leu Gly		
35	40	45	
Leu Gly Val Val Asp Asn Asn Gly	Asn Gly Ala Arg Val Gln Arg Val		
50	55	60	
Val Gly Ser Ala Pro Ala Ala Ser	Leu Gly Ile Ser Thr Gly Asp Val		
65	70	75	80
Ile Thr Ala Val Asp Gly Ala Pro	Ile Asn Ser Ala Thr Ala Met Ala		
85	90	95	
Asp Ala Leu Asn Gly His His Pro	Gly Asp Val Ile Ser Val Asn Trp		
100	105	110	
Gln Thr Lys Ser Gly Gly Thr Arg	Thr Gly Asn Val Thr Leu Ala Glu		
115	120	125	
Gly Pro Pro Ala			
130			

&lt;210&gt; 849

&lt;211&gt; 31

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 849

gggggaattca tcaactatgt gcgcctctg c

31

&lt;210&gt; 850

&lt;211&gt; 40

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 850

gggctcagagt cactcgccca cgaattccgt gtaaaacagg

40

&lt;210&gt; 851

&lt;211&gt; 1203

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 851

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 cagggtattcg ccattccgat cgggcaggcg atggcgatcg cgggcagat caagcttccc 120  
 accgttcata tggggcctac cgccttccct ggcttgggtg ttgtcgacaa caacggcaac 180  
 ggcgcacagag tccaaacgggt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240  
 ggcgacgtga tcaccggcgt cgcggcgct ccgatcaact cggccacggc gatggcggac 300  
 ggcgttaacg ggcacatcc cggtagcgtc atctcgggtg cctggcaaac caagtccggc 360  
 ggcacggcta cagggaaagt gacattggcc gagggacccc cggccgaatt catcacctat 420  
 gtgcgcctc tgcgtctgga agtgggggta gaggagaagt tcatgacct ggtgctgggc 480  
 attggctccag tgcctggcct ggtctgtgtc ccgctccctag gctcagccag tgaccactgg 540  
 cgtggacgct atggccggcg cgggccttca atctgggcaac tgtccttggg catcctgctg 600

316

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cggtgcacc agctgtgtg ccgcatgccc cgcacctgc gccgctctt cgtggtgag 1140
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tga 1260

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&lt;210&gt; 852

&lt;211&gt; 480

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 852

```

Met His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
      5      10      15
Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
      20      25      30
Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
      35      40      45
Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
      50      55      60
Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
      65      70      75      80
Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
      85      90      95
Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
      100     105     110
Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
      115     120     125
Leu Ala Glu Gly Pro Pro Ala Glu Phe Ile Thr Tyr Val Pro Pro Leu
      130     135     140
Leu Leu Glu Val Gly Val Glu Glu Lys Phe Met Thr Met Val Leu Gly
      145     150     155     160
Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser Ala
      165     170     175
Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Arg Pro Phe Ile Trp
      180     185     190
Ala Leu Ser Leu Gly Ile Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala
      195     200     205
Gly Trp Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu
      210     215     220
Ala Leu Leu Ile Leu Gly Val Gly Leu Leu Asp Phe Cys Gly Gln Val
      225     230     235     240
Cys Phe Thr Pro Leu Glu Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro
      245     250     255
Asp His Cys Arg Gln Ala Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu
      260     265     270
Gly Gly Cys Leu Gly Tyr Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser
      275     280     285
Ala Leu Ala Pro Tyr Leu Gly Thr Gln Glu Glu Cys Leu Phe Gly Leu
      290     295     300
Leu Thr Leu Ile Phe Leu Thr Cys Val Ala Ala Thr Leu Leu Val Ala
      305     310     315     320

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317

```

Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala
      325      330      335
Pro Ser Leu Ser Pro His Cys Cys Pro Cys Arg Ala Arg Leu Ala Phe
      340      345      350
Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Gln Leu Cys Cys Arg
      355      360      365
Met Pro Arg Thr Leu Arg Arg Leu Phe Val Ala Glu Leu Cys Ser Trp
      370      375      380
Met Ala Leu Met Thr Phe Thr Leu Phe Tyr Thr Asp Phe Val Gly Glu
      385      390      395      400

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<210> 853
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<212> PRT
<213> Homo sapiens

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<400> 853
Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser Ala Cys Asp Val
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Ser Val Arg Val
      20

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<210> 854
<211> 60
<212> DNA
<213> Homo sapiens

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<400> 854
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```

<210> 855
<211> 10
<212> PRT
<213> Homo sapiens

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```

<400> 855
Ala Ser Ala Cys Asp Val Ser Val Arg Val
      5      10

```

```

<210> 856
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<212> DNA
<213> Homo sapiens

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```

<400> 856
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                                     30

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```

<210> 857
<211> 9
<212> PRT
<213> Homo sapiens

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```

<400> 857
Ala Ser Ala Cys Asp Val Ser Val Arg
  1      5

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<210> 858

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318

<211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 858  
 Ser Ala Cys Asp Val Ser Val Arg Val  
 5

<210> 859  
 <211> 27  
 <212> DNA  
 <213> Homo sapiens

<400> 859  
 tatgcctgtg atgtatccgt acgtgtg 27

<210> 860  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 860  
 Gly Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser  
 5 10 15  
 Ala Ser Asp

<210> 861  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 861  
 Val Pro Pro Leu Leu Leu Glu Val Gly Val Glu Glu Lys Phe Met Thr  
 5 10 15  
 Met Val Leu

<210> 862  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 862  
 Met Val Gln Arg Leu Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala  
 5 10 15  
 Gln Leu Leu

<210> 863  
 <211> 57  
 <212> DNA  
 <213> Homo sapiens

<220>  
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 <222> (1)... (57)  
 <223> n = A,T,C or G

<400> 863  
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<210> 864  
<211> 57  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
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<223> n = A,T,C or G

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<212> DNA  
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<212> PRT  
<213> Homo sapiens

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<210> 867  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 867  
Arg Met Pro Thr Val Leu Gln Cys Val  
1 8

<210> 868  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 868  
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1 8

320

<210> 869  
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<212> PRT  
<213> Homo sapiens

<400> 869  
Met Leu Ile Lys Leu Asp Glu Ser Val  
1 5

<210> 870  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 870  
Leu Leu Ala Asn Asp Leu Met Leu Ile  
1 5

<210> 871  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 871  
Leu Leu Ala Asn Gly Arg Met Pro Thr Val  
1 5 10

<210> 872  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 872  
Leu Met Leu Ile Lys Leu Asp Glu Ser Val  
1 5 10

<210> 873  
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<212> PRT  
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<400> 873  
Val Leu Glu Cys Val Asn Val Ser Val Val  
1 5 10

<210> 874  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 874  
Gly Leu Leu Ala Asn Gly Arg Met Pro Thr  
1 5 10

<210> 875  
<211> 10  
<212> PRT



321

&lt;213&gt; Homo sapiens

&lt;400&gt; 875

Thr Val Leu Gln Cys Val Asn Val Ser Val  
 1 5 10

&lt;210&gt; 876

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 876

Gly Val Leu Val His Pro Gln Trp Val  
 1 5

&lt;210&gt; 877

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 877

Val Leu Val His Pro Gln Trp Val Leu  
 1 5

&lt;210&gt; 878

&lt;211&gt; 1195

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 878

ccgagactca cggtrcaagct aaggcgaaga gtgggtgggt gaagccatag tattttatag 60  
 aattaatgga aagcagaaaa gacatcacaa accaagaaga actttggaaa atgaagccta 120  
 ggagaaattt agaagaagac gattatttgc ataaggacac gggagagacc agcatgctaa 180  
 aaagacctgt gcttttgcct ttgcacacaa cagcccatgc tgatgaattt gactgccctt 240  
 cagaacttca gcacacacag gaactctttc cacagtggca cttgccaat aaaatagctg 300  
 ctattatagc atctctgact ttctcttaca ctctctgag ggaagtaatt caccctttag 360  
 caacttccca tcaacaatat ttttataaaa ttccaatctt ggtcatcaac aagtccttgc 420  
 caatggcttc catcactctc ttggcattgg tttaacctgc aggtgtgata gcagcaattg 480  
 tccaacttca taatggaaac aagtataaga agtttcnaca ttggttggat aagtggatgt 540  
 taacagaaaa gcagtttggg ctctctcagt tcttttttgc tctactgcat gcaatttata 600  
 gtctgtctta cccaatgagg cgtactctaca gatacaagtt gctaaactgg gcatatcaac 660  
 aggtccaaca aaataaagaa gatgcttggg ttgagcatga tgtttggaga atggagattt 720  
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 ttgttgcctt gatattttaa agcatactat tcttgcctat cttgaggaag aagatactga 1020  
 agattagaca tggttgggaa gacgtcacca aaatttaaca aactgagata tgttccagat 1080  
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 tcaagtttgt atttgttaat aaatgatta ttcaaggaaa aaaaaaaaaa aaaaa 1195

&lt;210&gt; 878

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

322

&lt;400&gt; 879

Met Glu Ser Arg Lys Asp Ile Thr Asn Gln Glu Glu Leu Trp Lys Met  
 5 10 15  
 Lys Pro Arg Arg Asn Leu Glu Glu Asp Tyr Leu His Lys Asp Thr  
 20 25 30  
 Gly Glu Thr Ser Met Leu Lys Arg Pro Val Leu Leu His Leu His Gln  
 35 40 45  
 Thr Ala His Ala Asp Glu Phe Asp Cys Pro Ser Glu Leu Gln His Thr  
 50 55 60  
 Gln Glu Leu Phe Pro Gln Trp His Leu Pro Ile Lys Ile Ala Ala Ile  
 65 70 75 80  
 Ile Ala Ser Leu Thr Phe Leu Tyr Thr Leu Leu Arg Glu Val Ile His  
 85 90 95  
 Pro Leu Ala Thr Ser His Gln Gln Tyr Phe Tyr Lys Ile Pro Ile Leu  
 100 105 110  
 Val Ile Asn Lys Val Leu Pro Met Val Ser Ile Thr Leu Leu Ala Leu  
 115 120 125  
 Val Tyr Leu Pro Gly Val Ile Ala Ala Ile Val Gln Leu His Asn Gly  
 130 135 140  
 Thr Lys Tyr Lys Lys Phe Pro His Trp Leu Asp Lys Trp Met Leu Thr  
 145 150 155 160  
 Arg Lys Gln Phe Gly Leu Leu Ser Phe Phe Phe Ala Val Leu His Ala  
 165 170 175  
 Ile Tyr Ser Leu Ser Tyr Pro Met Arg Arg Ser Tyr Arg Tyr Lys Leu  
 180 185 190  
 Leu Asn Trp Ala Tyr Gln Gln Val Gln Gln Asn Lys Glu Asp Ala Trp  
 195 200 205  
 Ile Glu His Asp Val Trp Arg Met Glu Ile Tyr Val Ser Leu Gly Ile  
 210 215 220  
 Val Gly Leu Ala Ile Leu Ala Leu Leu Ala Val Thr Ser Ile Pro Ser  
 225 230 235 240  
 Val Ser Asp Ser Leu Thr Trp Arg Glu Phe His Tyr Ile Gln Ser Lys  
 245 250 255  
 Leu Gly Ile Val Ser Leu Leu Leu Gly Thr Ile His Ala Leu Ile Phe  
 260 265 270  
 Ala Trp Asn Lys Trp Ile Asp Ile Lys Gln Phe Val Trp Tyr Thr Pro  
 275 280 285  
 Pro Thr Phe Met Ile Ala Val Phe Leu Pro Ile Val Val Leu Ile Phe  
 290 295 300  
 Lys Ser Ile Leu Phe Leu Pro Cys Leu Arg Lys Lys Ile Leu Lys Ile  
 305 310 315 320  
 Arg His Gly Trp Glu Asp Val Thr Lys Ile Asn Lys Thr Glu Ile Cys  
 325 330 335  
 Ser Gln Leu

&lt;210&gt; 880

&lt;211&gt; 2172

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 880

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323

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ccgcctgcct cccaaagtgc tgggattaca ggcattgagcc accgcacaca gctgggactg 480
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tgtctcccat ac 2172

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&lt;210&gt; 881

&lt;211&gt; 2455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 881

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&lt;210&gt; 882

&lt;211&gt; 2455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 882

caagcttaaaa	atgggtttctt	gaaatcagtg	attagcattc	actcaccagt	acccctacta	60
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ttaaatcatt	gtactgtggt	tatcattttt	ctgcatttat	tttaccctac	ttcctttgta	360
acttgctcta	tgtcttttta	attctctgct	gtcttttatg	gctttcaact	tcataaatla	420
catgtttttc	caaatctctt	tgtgaattcc	agagagggcc	aggcacgggtg	gtcacatct	480
gtaatcccag	cactttgggg	aggtcgagac	gggtggatca	cttgagggtca	ggagtttgag	540
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ggacagatgt	ccgataatcc	tttttacatt	tgggcatcct	tgggtagctc	gtcttgtagg	1800
aattggacttg	cttcaaatgt	gagggcaggca	gaccccttcag	acgggtatat	ggagccctgt	1860

325

```

tttcagttgc ttttctaatt ctctcttata gtttacctca aaatcttccct gaggtctcgc 1920
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cacctactga ctacacgggt aggagtgcaa gggtagaatt catgttttat tcatctttgg 2040
gtctgtagca cccagcaaag tctcagtaa atgcgcagta attgatttga cctctgaaca 2100
aatcacact gtactaagaa tctacacacc gaagacaaa aacacagcaa atttgagtgc 2160
tacagggtgc acgcttggca tcacacatgt gctgtgtat tctctagggt ggtaaccagg 2220
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```

<210> 883  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

<400> 883  
 Met Thr His Ser Ser Ala Trp Leu Glu Arg Pro Gln Glu Thr Tyr Asn  
                   5                  10                  15  
 His Gly Gly Arg Arg Arg Gly Ser Lys Ala Arg Leu Thr Trp Trp Gln  
                   20                  25                  30  
 Glu Arg Thr Ser Glu Gly Gly Asp Cys His Lys Leu Phe Phe Phe Glu  
                   35                  40                  45  
 Thr Arg Val Trp Pro Cys Cys Pro Gly Trp Ser Ala Val Ala  
                   50                  55                  60

<210> 884  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 884  
 Met Val Glu Gly Glu Gly Glu Ala Arg His Val Leu His Gly Gly Arg  
                   5                  10                  15  
 Arg Glu Arg Val Arg Gly Glu Thr Ala Thr Asn Phe Phe Phe Leu Arg  
                   20                  25                  30  
 Gln Glu Ser Gly Pro Val Ala Gln Ala Gly Val Gln Trp His Asp Leu  
                   35                  40                  45  
 Ser Ser Leu Gln Pro Leu Pro His Arg Phe Lys Gln Phe Ser Cys Leu  
                   50                  55                  60  
 Ser Leu Pro His Ser Trp Asp His Arg Tyr Ala Pro Pro His Leu Ala  
                   65                  70                  75                  80  
 Asn Phe Cys Ser Phe Ser Arg Asp Gly Val Ser Leu Cys Cys Ser Gly  
                   85                  90                  95  
 Trp Ser Lys Thr Pro Gly Leu Gln Gln Ser Ala Cys Leu Gly Leu Pro  
                   100                  105                  110  
 Lys Cys Trp Gly Tyr Arg His Lys Pro Pro His Pro Ala Cys His Ile  
                   115                  120                  125  
 Leu Leu Asn Tyr Gln Val Ser  
                   130                  135

<210> 885  
 <211> 77  
 <212> PRT  
 <213> Homo sapiens

<400> 885  
 Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro Ile Ile Gln

326

```

          5          10          15
Ser Pro Pro Thr Arg Ser Pro Pro Thr Arg Gly Ile Gly Trp Gly His
          20          25          30
Arg Ala Lys Pro Tyr Gln Met Leu Gln Gly Leu Gly Thr Leu Arg Pro
          35          40          45
Leu Arg Pro Gly Val Ser Val Thr Leu Leu Gly Ser Val Cys Leu Gln
          50          55          60
Asp Leu Pro Pro Leu Pro Trp Tyr Arg Arg Lys Val Leu
          65          70          75

```

&lt;210&gt; 886

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 886

```

Met Leu Val His Ile Tyr Ser Cys Cys Gly Met Val Tyr Arg Phe Gly
          5          10          15
Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu Ala Ser Leu Gly Ser Ser
          20          25          30
Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp Arg Gln Ala Asp Pro Ser
          35          40          45
Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu Leu Phe
          50          55          60

```

&lt;210&gt; 887

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 887

```

Met Cys Leu Cys Ile Pro Leu Gly Gly Tyr Gln Glu Leu Cys His Cys
          5          10          15
Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg
          20          25          30
Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro
          35          40          45
Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly
          50          55          60
Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
          65          70          75

```

&lt;210&gt; 888

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 888

```

Met Val Lys Ser Arg Phe Thr Lys Asn Thr Lys Ile Thr Gln Ala Trp
          5          10          15
Trp Arg Ala Pro Val Ile Pro Gly Thr Arg Glu Ala Glu Gly Gly Glu
          20          25          30
Ser Leu Glu Pro Gly Arg Leu Arg Glu Glu Asn Arg Leu Asn Pro Gly
          35          40          45
Gly Arg Gly Cys Ser Glu Pro Arg Ser Cys Cys Cys Thr Pro Ala Trp
          50          55          60
Ser Thr Glu Gln Asp Ser Ala Ser Lys Thr Asn Lys
          65          70          75

```

327

&lt;210&gt; 889

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 889

```

Met Leu Leu His Ser Ser Leu Val Asn Arg Ala Arg Leu Cys Leu Lys
      5                      10                      15
Asn Lys Gln Ile Asn Lys Gln Thr Asn Lys Thr Glu Arg Phe Cys Cys
      20                      25                      30
Asn Val Gln Gly Ala Ile Cys Ser Phe Lys Lys Ile Ile Phe Gly Gln
      35                      40                      45
Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp Glu Ala Lys Val
      50                      55                      60
Gly Gly Ser Phe Glu Val Arg Ser Leu Arg Ser Ala Trp Pro Thr Trp
      65                      70                      75                      80

```

&lt;210&gt; 890

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 890

```

Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro His Asn Pro
      5                      10                      15
Ile Thr Ser His Gln Val Ser Ser Asp Thr Trp Asp Trp Val Gly Thr
      20                      25                      30
Gln Ser Gln Thr Val Ser Asp Ala Ala Gly Ala Gly Asp Thr Glu Thr
      35                      40                      45
Thr Gln Thr Trp Cys Leu Cys His Ser Ser Gly Leu Cys Leu Ser Pro
      50                      55                      60
Gly Pro Pro Ser Pro Ser Met Val
      65                      70

```

&lt;210&gt; 891

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 891

```

Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro Ile Ile Gln
      5                      10                      15
Ser Pro Pro Thr Arg Ser Pro Pro Thr Arg Gly Ile Gly Trp Gly His
      20                      25                      30
Arg Ala Lys Pro Tyr Gln Met Leu Gln Gly Leu Gly Thr Leu Arg Pro
      35                      40                      45
Leu Arg Pro Gly Val Ser Val Thr Leu Leu Gly Ser Val Cys Leu Gln
      50                      55                      60
Asp Leu Pro Pro Leu Pro Trp Tyr Arg Arg Lys Val Leu
      65                      70                      75

```

&lt;210&gt; 892

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 892

```
<210> 893
<211> 76
<212> PRT
<213> Homo sapiens
```

```
<400> 893
Met Cys Leu Cys Ile Pro Leu Gly Gly Tyr Gln Glu Leu Cys His Cys
      5                                10                        15
Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg
      20                                25                        30
Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro
      35                                40                        45
Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly
      50                                55                        60
Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
      65                                70                        75
```

```
<210> 394
<211> 2479
<212> DNA
<213> Homo sapiens
```

```

<400> 894
gtcatattga acatttcaga taactatcat taactgatgc tgttgataac agcaagatgg 60
ctttgaactc egggtcacca ccagctattg gacattacta tgaaaaccat ggataccaac 120
cgaaaaaccc ctatcccgca cagcccactg tggtecccac tgtctacgag gtgcatecgg 180
ctcagtaacta cccgtccccc gtgccccagt acgccccgag ggtcctgacg caggcttcca 240
accccgtcgt ctgcacgcac cccaaatccc catcogggac agtgtgcacc tcaaaagacta 300
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cttcaggtac ctgcattcaac cctctaaact cgtgtgatgg agtgtcacac tgcocccggcg 480
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catctcagag gaagtctctg caccctgtgt gccaaagaca ctggaaacgag aactacgggc 600
ggggggcctg cagggacatg ggcctataaga ataattttta ctctagccaa ggaatagtgg 660
atgacagcgg atccaccage tttatgaaac tgaacacaag tgcgggcaat gtcgatatct 720
ataaaaaact gtaccacagt gatgcctgtt cttcaaaaagc agtggtttct ttacgctgtt 780
tagcctgcgg ggtcaacttg aactcaagcc gccagagcag gatcgtgggc ggtgagagcg 840
cgctccgggg ggcctggccc tggcaggtea gctgcacgt ccagaacgtc cactgtgtcg 900
gaggctccat cctaccacccc gagtggatcg tgacagccgc ccactcgctg gaaaaacctc 960
ttaacaatcc atggcattgg acggcatttg cggggatttt gacacaactt ttcattgtct 1020
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agaacaatga cattgcctg atgaaagtgc agaagcctat gactttcaac gacctagtga 1140
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cggggtgggg ggccaccgag gagaaagggg agacctcaga agtgcctgaac gctgccaaag 1260
tgctttctat tgagacccag agatgcacca gcagatatgt ctatgacaa ctgatecac 1320
cagccatgat ctgtgcggcg tctctcagg gaaacgtcga ttcttgccag ggtgacagt 1380
ggggcctct ggtcacttc acaacaata tctggtggct gataggggat acaagctgg 1440
gttctggctg tgccaaagct tacagaccag cagtgtacgg gaatgtgatg gtattcacgg 1500
actgatttta tcgacaaatg aagccaaaac cctaatccac atcgtctctg tcttgcact 1560

```



329

```

cgttttacaa gaaaacaatg gggctggitt tgcttccccg tgcattgatt actcttagag 1620
atgattcaga ggtcaactta tttttattaa acagtgaact tgtctggctt tggcaactct 1680
tgccatactg tgcaggctgc agtggctccc ctgccagacc tgcctcctct aacctctgt 1740
ccgcaagggg tgatggccgg ctggttgtgg gcactggcgg tcaattgtgg aaggaagagg 1800
gtttgaggct gccccattg agatcttccr gctgagtcct ttccaggggc caattttgga 1860
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aaggggaaca gaacatttt tttctttatg gggtgagaat atagacagtg cctttggtgc 2160
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ctgagttcaa agccattt 2479

```

&lt;210&gt; 895

&lt;211&gt; 492

&lt;212&gt; FRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 895

```

Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu
      5      10      15
Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val
      20      25      30
Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
      35      40      45
Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
      50      55      60
Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
      65      70      75      80
Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
      85      90      95
Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys
      100     105     110
Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn
      115     120     125
Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp
      130     135     140
Glu Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Gln Met
      145     150     155     160
Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp
      165     170     175
Asn Gln Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn
      180     185     190
Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser
      195     200     205
Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys
      210     215     220
Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg
      225     230     235     240
Cys Leu Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile
      245     250     255
Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser
      260     265     270
Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro

```

330

275	280	285
Glu Trp Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn		
290	295	300
Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met		
305	310	315
Phe Tyr Gly Ala Gly Tyr Gln Val Gln Lys Val Ile Ser His Pro Asn		
325	330	335
Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln		
340	345	350
Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn		
355	360	365
Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp		
370	375	380
Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala		
385	390	395
Lys Val Leu Leu Ile Gln Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr		
405	410	415
Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly		
420	425	430
Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser		
435	440	445
Asn Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly		
450	455	460
Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe		
465	470	475
Thr Asp Trp Ile Tyr Arg Gln Met Lys Ala Asn Gly		
485	490	

&lt;210&gt; 896

&lt;211&gt; 683

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 896

```

gtcatattga acattccaga tacctatcat taatcgatgc tgttgataac agcaagatgg 60
ctttgaactc aggytcacca ccagctattg gaccttacta tgaaaaccat ggataccaac 120
cggaataccc ctatcccgca cagcccaactg ttgtcccccac tgtctacgag gtgcatecgg 180
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cctcaggtac ctgcatcaac cctctaaact ggtgtgatgg cgtgtcacac tgcctccggc 480
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catctcagag gaagtccctg caccctgtgt gccaaagcga ctggaacgag aactacgggc 600
gggcggcctg cagggacatg ggctataaga ataatttttt ctctagccaa ggaatagtgg 660
atgacagcgg atccaccagc ttt                                     683

```

&lt;210&gt; 897

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 897

```

Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu
1           5           10           15

```

331

```

Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val
      20      25      30
Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
      35      40      45
Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
      50      55      60
Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
      65      70      75      80
Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
      85      90      95
Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys
      100      105      110
Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn
      115      120      125
Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp
      130      135      140
Glu Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Gln Met
      145      150      155      160
Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp
      165      170      175
Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn
      180      185      190
Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser
      195      200      205
Phe

```

```

<210> 898
<211> 27
<212> PRT
<213> Homo sapiens

```

```

<400> 898
Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Gln Pro Gly Thr
  1           5           10           15
Glu Ala Arg Arg His Tyr Asp Glu Gly Val Arg
      20      25

```

```

<210> 899
<211> 35
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> PCR primer

```

```

<400> 899
ggatccggccg ccaccatgtc actttctagc etgct

```

35

```

<210> 900
<211> 27
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> PCR primer

```

```

<400> 900

```

332

gtcgactcag ctggaccaca gccgcag

27

&lt;210&gt; 901

&lt;211&gt; 34

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 901

ggatccgcgc ccaccatggg ctgcaggetg ctct

34

&lt;210&gt; 902

&lt;211&gt; 27

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 902

gtcgactcag aactccttcc tcttgac

27

&lt;210&gt; 903

&lt;211&gt; 936

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1)...()

&lt;223&gt; n = A,T,C or G

&lt;400&gt; 903

atgggctgca	ggctgntctg	ctgtggcggt	ctctgtctcc	tgggagcggt	ccccatggaa	60
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ccactggagc	tcattgtttg	ctacagtctt	gaagaacggg	ttgaaaacaa	cagtgtgcca	240
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cagccagaag	actcggccct	gtatctctgc	gccagcagcc	aagaccggac	aagcagctcc	360
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gccacactgg	tgtgcctggc	cacaggcttc	taccccgacc	acgtggagct	gagctggtgg	540
gtgaatggga	aggaggtgca	cagtggggtc	agcacagacc	cgcagccctc	caaggagcag	600
cccgccctca	atgactccag	atactgcttg	agcagccgcc	tgaggggtctc	ggccaccttc	660
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gacgagtggg	cccgagatag	ggccaaacct	gtcaccacga	togtcagcgc	cgaggcctgg	780
ggtagagcag	actgtggctt	cacctccgag	tcttaccagc	aaggggtcct	gtctgccacc	840
atcctctatg	agatcttggc	aggggaaggcc	accttgtatg	ccgtgctggg	cagtgccttc	900
gtgctgatgg	ccatgggtcaa	gagaaaggat	ttctga			936

&lt;210&gt; 904

&lt;211&gt; 834

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

333

<220>  
 <221> misc feature  
 <222> {1}...()  
 <223> n = A,T,C or G

<400> 904  
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 gccagagaaga taactcaaac ccaaccagga atgttcgtgc aggaanaagga ggcctgtgact 120  
 ctggactgca catatgacac cagtgtatca agttatggtc tcttctggtc caagcagccc 180  
 agcagtgagg aaatgatttt tcttatttat caggggtctt atgacgagca aaatgcacac 240  
 gaaggtcgtt actcattgaa ttccagagag gcaagaaaaat cggccaaact tgcattctcc 300  
 gcttcacaae tgggggactc agcaatgtat ttctgtgcac tgagagaggg cgggggagga 360  
 ggaacacaae tcaactttgg gacaggcaat cagctaaaag tggaaactca tatccagaac 420  
 cctgacccctg cctgtgtaca gctgagagac tctaaatcca gtgacaagtc tgtctgcta 480  
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 acagacaaaa ctgtgtctaga catgaggtct atggacttca agagcaacag tgcctgtggcc 600  
 tggagcaaca aatctgactt tgcattgtga aacggcttca acacagcat tattccagaa 660  
 gacacettct tccccagccc agaaagtcc tctgatgtca agctggctga gaaaagcttt 720  
 gaacagata cgaacctaaa ctttcacaae ctgtcagtga ttgggttccg aatctctctc 780  
 ctgaagtggt cgggttttaa tctgtctatg acgtgcgggc tctgttccag ctga 834

<210> 905  
 <211> 311  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> variant  
 <222> {1}...(311)  
 <223> Xaa = Any amino acid

<400> 905  
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 Val Pro Met Glu Thr Gly Val Thr Gln Thr Pro Arg His Leu Val Met  
                   20                  25                  30  
 Gly Met Thr Asn Lys Lys Ser Leu Lys Cys Glu Gln His Leu Gly His  
                   35                  40                  45  
 Asn Ala Met Tyr Trp Tyr Lys Gln Ser Ala Lys Lys Pro Leu Glu Leu  
                   50                  55                  60  
 Met Phe Val Tyr Ser Leu Glu Glu Arg Val Glu Asn Asn Ser Val Pro  
                   65                  70                  75                  80  
 Ser Arg Phe Ser Pro Glu Cys Pro Asn Ser Ser His Leu Phe Leu His  
                   85                  90                  95  
 Leu His Thr Leu Gln Pro Glu Asp Ser Ala Leu Tyr Leu Cys Ala Ser  
                   100                  105                  110  
 Ser Gln Asp Arg Thr Ser Ser Ser Tyr Glu Gln Tyr Phe Gly Pro Gly  
                   115                  120                  125  
 Thr Arg Leu Thr Val Thr Glu Asp Leu Lys Asn Val Phe Pro Pro Glu  
                   130                  135                  140  
 Val Ala Val Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys  
                   145                  150                  155                  160  
 Ala Thr Leu Val Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu  
                   165                  170                  175  
 Leu Ser Trp Trp Val Asn Gly Lys Glu Val His Ser Gly Val Ser Thr  
                   180                  185                  190  
 Asp Pro Gln Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr  
                   195                  200                  205

334

Cys Leu Ser Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro  
 210 215 220  
 Arg Asn His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Gln Asn  
 225 230 235 240  
 Asp Glu Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser  
 245 250 255  
 Ala Glu Ala Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Glu Ser Tyr  
 260 265 270  
 Gln Gln Gly Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu Leu Gly  
 275 280 285  
 Lys Ala Thr Leu Tyr Ala Val Leu Val Ser Ala Leu Val Leu Met Ala  
 290 295 300  
 Met Val Lys Arg Lys Asp Phe  
 305 310

&lt;210&gt; 906

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 906

Met Ser Leu Ser Ser Leu Leu Lys Val Val Thr Ala Ser Leu Trp Leu  
 5 10 15  
 Gly Pro Gly Ile Ala Gln Lys Ile Thr Gln Thr Gln Pro Gly Met Phe  
 20 25 30  
 Val Gln Glu Lys Glu Ala Val Thr Leu Asp Cys Thr Tyr Asp Thr Ser  
 35 40 45  
 Asp Gln Ser Tyr Gly Leu Phe Trp Tyr Lys Gln Pro Ser Ser Gly Glu  
 50 55 60  
 Met Ile Phe Leu Ile Tyr Gln Gly Ser Tyr Asp Glu Gln Asn Ala Thr  
 65 70 75 80  
 Gln Gly Arg Tyr Ser Leu Asn Phe Gln Lys Ala Arg Lys Ser Ala Asn  
 85 90 95  
 Leu Val Ile Ser Ala Ser Gln Leu Gly Asp Ser Ala Met Tyr Phe Cys  
 100 105 110  
 Ala Met Arg Glu Gly Ala Gly Gly Gly Asn Lys Leu Thr Phe Gly Thr  
 115 120 125  
 Gly Thr Gln Leu Lys Val Gln Leu Asn Ile Gln Asn Pro Asp Pro Ala  
 130 135 140  
 Val Tyr Gln Leu Arg Asp Ser Lys Ser Ser Asp Lys Ser Val Cys Leu  
 145 150 155 160  
 Phe Thr Asp Phe Asp Ser Gln Thr Asn Val Ser Gln Ser Lys Asp Ser  
 165 170 175  
 Asp Val Tyr Ile Thr Asp Lys Thr Val Leu Asp Met Arg Ser Met Asp  
 180 185 190  
 Phe Lys Ser Asn Ser Ala Val Ala Trp Ser Asn Lys Ser Asp Phe Ala  
 195 200 205  
 Cys Ala Asn Ala Phe Asn Asn Ser Ile Ile Pro Glu Asp Thr Phe Phe  
 210 215 220  
 Pro Ser Pro Glu Ser Ser Cys Asp Val Lys Leu Val Glu Lys Ser Phe  
 225 230 235 240  
 Gln Thr Asp Thr Asn Leu Asn Phe Gln Asn Leu Ser Val Ile Gly Phe  
 245 250 255  
 Arg Ile Leu Leu Leu Lys Val Ala Gly Phe Asn Leu Leu Met Thr Leu  
 260 265 270  
 Arg Leu Trp Ser Ser  
 275

335

<210> 907  
 <211> 1536  
 <212> DNA  
 <213> Homo sapiens

<400> 907

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atgtttcagc	acctgatgca	gaagcgggaag	cacacccagc	ggacgtatgg	accactgacc	180
tgcactctct	atgacctcac	agagatcgac	tcttcagggg	atgagcagtc	cctgctggaa	240
cttatcatca	ccaccaagaa	gggggaggct	cgccagatcc	tggaccagac	gcgggtgaag	300
gagctgggtg	gcctcaagtg	gaagcgggtac	ggcgggcccgt	acttctgcat	gctgggtgcc	360
atatatctgc	tgtacatcat	ctgcttcacc	atgtgctgca	tctacggccc	cctcaagccc	420
aggaccaata	accgcacgag	cccccgggac	aacacccctct	tacagcagaa	gctacttcag	480
gaagcctaca	tgaacctaa	ggacgatata	cggtgggtcg	ggagctgggt	gactgtcatt	540
ggggtatata	tcatctctgt	ggtagaggtt	ccagacatct	tcagaatggg	ggtcactcgc	600
ttctttggac	agacctcct	tgggggcccc	ttccatgtcc	tcatcatcac	ctatgccttc	660
atgggtgctg	tgaacctggg	gatggggctc	atcagtgcca	gcggggagggt	ggtacccatg	720
tcctttgcaac	tggctgctgg	ctgggtgcaac	gtcatgtact	tgcggcgagg	attccagatg	780
ctaggccccc	tcacctcat	gattcagaag	atgatttttg	gcgacctgat	gcgattctgc	840
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gaggaccccc	aggagctagg	ccacttctac	gactaccccc	tggccctgtt	cagcaccttc	960
gagctgttcc	ttacctcat	cgatggcccc	gccaaactaca	acgtggacct	gccttctatg	1020
tacagcatca	cctatgctgc	ctttgcacac	atcgccacac	tgtcatgct	caacctcttc	1080
attgcacatg	tggggcgacac	tcactggcga	gtggcccatg	agcgggatga	gctgtggagg	1140
gcccagattg	tggccaccac	ggtgatgctg	gagcgggaag	tgcctcgctg	cctgtggcct	1200
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<210> 908  
 <211> 1533  
 <212> DNA  
 <213> Homo sapiens

<400> 908

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gtgcccacac	accaggggtct	cccccccttcc	aagctgggtg	gagtgaggag	taacactgtg	120
atgtttcagc	acctgatgca	gaagcgggaag	cacacccagc	ggacgtatgg	accactgacc	180
tgcactctct	atgacctcac	agagatcgac	tcttcagggg	atgagcagtc	cctgctggaa	240
cttatcatca	ccaccaagaa	gggggaggct	cgccagatcc	tggaccagac	gcgggtgaag	300
gagctgggtg	gcctcaagtg	gaagcgggtac	ggcgggcccgt	acttctgcat	gctgggtgcc	360
atatatctgc	tgtacatcat	ctgcttcacc	atgtgctgca	tctacggccc	cctcaagccc	420
aggaccaata	accgcacgag	cccccgggac	aacacccctct	tacagcagaa	gctacttcag	480
gaagcctaca	tgaacctaa	ggacgatata	cggtgggtcg	ggagctgggt	gactgtcatt	540
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ttctttggac	agacctcct	tgggggcccc	ttccatgtcc	tcatcatcac	ctatgccttc	660
atgggtgctg	tgaacctggg	gatggggctc	atcagtgcca	gcggggagggt	ggtacccatg	720
tcctttgcaac	tggctgctgg	ctgggtgcaac	gtcatgtact	tgcggcgagg	attccagatg	780
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tggctgatgg	ctgtggtcat	cctgggcttt	gcttcagcct	tctatatcat	cctccagaca	900
gaggaccccc	aggagctagg	ccacttctac	gactaccccc	tggccctgtt	cagcaccttc	960
gagctgttcc	ttacctcat	cgatggcccc	gccaaactaca	acgtggacct	gccttctatg	1020
tacagcatca	cctatgctgc	ctttgcacac	atcgccacac	tgtcatgct	caacctcttc	1080

336

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attgccatga tggggcgacac tcaactggcga gtggcccacg agcgggatga gctgtggagg 1140
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ctggaggacg gggagagctg ggaatatcag atc 1533

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&lt;210&gt; 909

&lt;211&gt; 511

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 909

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Met Tyr Asn Leu Leu Leu Ser Tyr Asp Arg His Gly Asp His Leu Gln
                    5                      10                      15
Pro Leu Asp Leu Val Pro Asn His Gln Gly Leu Thr Pro Phe Lys Leu
                20                      25                      30
Ala Gly Val Glu Gly Asn Thr Val Met Phe Gln His Leu Met Gln Lys
                35                      40                      45
Arg Lys His Thr Gln Trp Thr Tyr Gly Pro Leu Thr Ser Thr Leu Tyr
                50                      55                      60
Asp Leu Thr Glu Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu
                65                      70                      75
Leu Ile Ile Thr Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln
                80                      85                      90
Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg
                95                      100                     105
Pro Tyr Phe Cys Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys
                110                     115                     120
Phe Thr Met Cys Cys Ile Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn
                125                     130                     135
Arg Thr Ser Pro Arg Asp Asn Thr Leu Leu Gln Gln Lys Leu Leu Gln
                140                     145                     150
Glu Ala Tyr Met Thr Pro Lys Asp Asp Ile Arg Leu Val Gly Glu Leu
                155                     160                     165
Val Thr Val Ile Gly Ala Ile Ile Ile Leu Leu Val Glu Val Pro Asp
                170                     175                     180
Ile Phe Arg Met Gly Val Thr Arg Phe Phe Gly Gln Thr Ile Leu Gly
                185                     190                     195
Gly Pro Phe His Val Leu Ile Ile Thr Tyr Ala Phe Met Val Leu Val
                200                     205                     210
Thr Met Val Met Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met
                215                     220                     225
Ser Phe Ala Leu Val Leu Gly Trp Cys Asn Val Met Tyr Phe Ala Arg
                230                     235                     240
Gly Phe Gln Met Leu Gly Pro Phe Thr Ile Met Ile Gln Lys Met Ile
                245                     250                     255
Phe Gly Asp Leu Met Arg Phe Cys Trp Leu Met Ala Val Val Ile Leu
                260                     265                     270
Gly Phe Ala Ser Ala Phe Tyr Ile Ile Phe Gln Thr Glu Asp Pro Glu
                275                     280                     285
Glu Leu Gly His Phe Tyr Asp Tyr Pro Met Ala Leu Phe Ser Thr Phe
                290                     295                     300
Glu Leu Phe Leu Thr Ile Ile Asp Gly Pro Ala Asn Tyr Asn Val Asp
                305                     310                     315
Leu Pro Phe Met Tyr Ser Ile Thr Tyr Ala Ala Phe Ala Ile Ile Ala
                320                     325                     330

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337

340	345	350
Thr Leu Leu Met Leu Asn Leu Leu Ile Ala Met Met Gly Asp Thr His		
355	360	365
Trp Arg Val Ala His Glu Arg Asp Glu Leu Trp Arg Ala Gln Ile Val		
370	375	380
Ala Thr Thr Val Met Leu Glu Arg Lys Leu Pro Arg Cys Leu Trp Pro		
385	390	395
Arg Ser Gly Ile Cys Gly Arg Glu Tyr Gly Leu Gly Asp Arg Trp Phe		
400	405	410
Leu Arg Val Glu Asp Arg Gln Asp Leu Asn Arg Gln Arg Ile Gln Arg		
415	420	425
Tyr Ala Gln Ala Phe His Thr Arg Gly Ser Glu Asp Leu Asp Lys Asp		
430	435	440
Ser Val Glu Lys Leu Glu Leu Gly Cys Pro Phe Ser Pro His Leu Ser		
445	450	455
Leu Pro Met Pro Ser Val Ser Arg Ser Thr Ser Arg Ser Ser Ala Asn		
460	465	470
Trp Glu Arg Leu Arg Gln Gly Thr Leu Arg Arg Asp Leu Arg Gly Ile		
475	480	485
Ile Asn Arg Gly Leu Glu Asp Gly Glu Ser Trp Glu Tyr Gln Ile		
490	495	500
	505	510

&lt;210&gt; 910

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 910

Met Tyr Asn Leu Leu Leu Ser Tyr Asp Arg His Gly Asp His Leu Gln	5	10	15
Pro Leu Asp Leu Val Pro Asn His Gln Gly Leu Thr Pro Phe Lys Leu	20	25	30
Ala Gly Val Glu Gly Asn Thr Val Met Phe Gln His Leu Met Gln Lys	35	40	45
Arg Lys His Thr Gln Trp Thr Tyr Gly Pro Leu Thr Ser Thr Leu Tyr	50	55	60
Asp Leu Thr Glu Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu	65	70	75
Leu Ile Ile Thr Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln	80	85	90
Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg	95	100	105
Pro Tyr Phe Cys Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys	110	115	120
Phe Thr Met Cys Cys Ile	125		
130			

&lt;210&gt; 911

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 911

Ala Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn Arg Thr Ser Pro Arg	5	10	15
Asp Asn Thr Leu Leu Gln Gln Lys Leu Leu Gln Glu Ala Tyr Met Thr	20	25	30
Pro Lys Asp Asp Ile Arg Leu Val Gly Glu Leu Val Thr Val Ile Gly			

338

35 40 45  
 Ala Ile Ile Ile Leu Leu Val  
 50 55

<210> 912  
 <211> 39  
 <212> FRT  
 <213> Homo sapiens

<400> 912  
 Glu Val Pro Asp Ile Phe Arg Met Gly Val Thr Arg Phe Phe Gly Gln  
 5 10 15  
 Thr Ile Leu Gly Gly Pro Phe His Val Leu Ile Ile Thr Tyr Ala Phe  
 20 25 30  
 Met Val Leu Val Thr Met Val  
 35

<210> 913  
 <211> 19  
 <212> FRT  
 <213> Homo sapiens

<400> 913  
 Met Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met Ser Phe Ala  
 5 10 15  
 Leu Val Leu

<210> 914  
 <211> 52  
 <212> FRT  
 <213> Homo sapiens

<400> 914  
 Gly Trp Cys Asn Val Met Tyr Phe Ala Arg Gly Phe Gln Met Leu Gly  
 5 10 15  
 Pro Phe Thr Ile Met Ile Gln Lys Met Ile Phe Gly Asp Leu Met Arg  
 20 25 30  
 Phe Cys Trp Leu Met Ala Val Val Ile Leu Gly Phe Ala Ser Ala Phe  
 35 40 45  
 Tyr Ile Ile Phe  
 50

<210> 915  
 <211> 213  
 <212> FRT  
 <213> Homo sapiens

<400> 915  
 Gln Thr Glu Asp Pro Glu Glu Leu Gly His Phe Tyr Asp Tyr Pro Met  
 5 10 15  
 Ala Leu Phe Ser Thr Phe Glu Leu Phe Leu Thr Ile Ile Asp Gly Pro  
 20 25 30  
 Ala Asn Tyr Asn Val Asp Leu Pro Phe Met Tyr Ser Ile Thr Tyr Ala  
 35 40 45  
 Ala Phe Ala Ile Ile Ala Thr Leu Leu Met Leu Asn Leu Leu Ile Ala  
 50 55 60  
 Met Met Gly Asp Thr His Trp Arg Val Ala His Glu Arg Asp Glu Leu

339

65	70	75	80
Trp Arg Ala Gln Ile Val Ala Thr Thr Val Met Leu Glu Arg Lys Leu			
	85	90	95
Pro Arg Cys Leu Trp Pro Arg Ser Gly Ile Cys Gly Arg Glu Tyr Gly			
	100	105	110
Leu Gly Asp Arg Trp Phe Leu Arg Val Glu Asp Arg Gln Asp Leu Asn			
	115	120	125
Arg Gln Arg Ile Gln Arg Tyr Ala Gln Ala Phe His Thr Arg Gly Ser			
	130	135	140
Glu Asp Leu Asp Lys Asp Ser Val Glu Lys Leu Glu Leu Gly Cys Pro			
	145	150	155
Phe Ser Pro His Leu Ser Leu Pro Met Pro Ser Val Ser Arg Ser Thr			
	160	165	170
Ser Arg Ser Ser Ala Asn Trp Glu Arg Leu Arg Gln Gly Thr Leu Arg			
	175	180	185
Arg Asp Leu Arg Gly Ile Ile Asn Arg Gly Leu Glu Asp Gly Glu Ser			
	190	195	200
Trp Glu Tyr Gln Ile			
210			

<210> 916  
 <211> 1302  
 <212> DNA  
 <213> Homo sapiens

<400> 916  
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 ttcatctcaa taggctccc tggtttagaa gaggtcagc totggttggc ettcocattg 180  
 tgctccctct accttattgc tgtgctaggt aacttgacaa tcatctacat tgtgaggact 240  
 gagcacagcc tgcattgagc catgtatata ttcttttgc tgccttcagg catggacatc 300  
 ctcatctcca cctcatccat gcccassatg ctggccatct totggttcaa ttcactacc 360  
 atccagtttg atgcttgctc gctacagatg ttggccatcc actccttate tggcatggaa 420  
 tccacagtgc tgcctggccat ggcttttgac cgtatgtgag ccctctgtca cccactggc 480  
 catgcacagc taattacgtt gctcgtgtc accaaaattg gtgtggctgc tgtggtggc 540  
 ggggtgcac tgatggcacc ccttctgtc ttcatcaagc agctgcccct ctgcccctcc 600  
 aatctctttt cccattctca ctgcctacac caagatgtca tgaagctggc ctgtgatgat 660  
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 gccaggccca aggcatttgg cacttggctc tctcatgtgt gtgctgtgt catattctat 840  
 gtacctttca ttggattgtc catggtgcat cgttttagca agcggcgtga ctctcggctg 900  
 ccgctcatct tggccaatat ctatctgctg gttcctctct tgotcaacc aattgtctat 960  
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 gcttcagagc cctaggtgtc agtgatcaa ctcttttcc attcagagtc ctctgattca 1080  
 gattttaatg ttaacatttt ggaagacagt attcagaaaa aaatttctct taataaaaaat 1140  
 acaactcaga tcttcasaat atgaactgg ttggggaate tccatttttt caatattatt 1200  
 ttcttctttg ttttcttgc acatacaatt attaatcccc tgactagggt gtggtttggg 1260  
 ggttattact ttctatttta ccatgcagtc caaatctaaa ct 1302

<210> 917  
 <211> 2061  
 <212> DNA  
 <213> Homo sapiens

<400> 917  
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 gtgtcagtga tcaaacctct tttccattca ggtcctctg attcagattt taatgttaac 120

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&lt;210&gt; 918

&lt;211&gt; 957

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 918

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&lt;210&gt; 919

341

<211> 954  
 <212> DNA  
 <213> Homo sapiens

<400> 919

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```

<210> 920  
 <211> 318  
 <212> PRT  
 <213> Homo sapiens

<400> 920

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      20              25              30
Pro Leu Cys Ser Leu Tyr Leu Ile Ala Val Leu Gly Asn Leu Thr Ile
      35              40              45
Ile Tyr Ile Val Arg Thr Glu His Ser Leu His Glu Pro Met Tyr Ile
      50              55              60
Phe Leu Cys Met Leu Ser Gly Ile Asp Ile Leu Ile Ser Thr Ser Ser
      65              70              75              80
Met Pro Lys Met Leu Ala Ile Phe Trp Phe Asn Ser Thr Thr Ile Gln
      85              90              95
Phe Asp Ala Cys Leu Leu Gln Met Phe Ala Ile His Ser Leu Ser Gly
      100             105             110
Met Glu Ser Thr Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala
      115             120             125
Ile Cys His Pro Leu Arg His Ala Thr Val Leu Thr Leu Pro Arg Val
      130             135             140
Thr Lys Ile Gly Val Ala Ala Val Val Arg Gly Ala Ala Leu Met Ala
      145             150             155             160
Pro Leu Pro Val Phe Ile Lys Gln Leu Pro Phe Cys Arg Ser Asn Ile
      165             170             175
Leu Ser His Ser Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys
      180             185             190
Asp Asp Ile Arg Val Asn Val Val Tyr Gly Leu Ile Val Ile Ile Ser
      195             200             205
Ala Ile Gly Leu Asp Ser Leu Leu Ile Ser Phe Ser Tyr Leu Leu Ile
      210             215             220
Leu Lys Thr Val Leu Gly Leu Thr Arg Glu Ala Gln Ala Lys Ala Phe
      225             230             235             240

```

442

Gly	Thr	Cys	Val	Ser	His	Val	Cys	Ala	Val	Phe	Ile	Phe	Tyr	Val	Pro
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Phe	Ile	Gly	Leu	Ser	Met	Val	His	Arg	Phe	Ser	Lys	Arg	Arg	Asp	Ser
			260					265						270	
Pro	Leu	Pro	Val	Ile	Leu	Ala	Asn	Ile	Tyr	Leu	Leu	Val	Pro	Pro	Val
			275				280						285		
Leu	Asn	Pro	Ile	Val	Tyr	Gly	Val	Lys	Thr	Lys	Glu	Ile	Arg	Gln	Arg
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Ile	Leu	Arg	Leu	Phe	His	Val	Ala	Thr	His	Ala	Ser	Glu	Pro		
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<212> FRT
<213> Homo sapiens
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<212> FRF
<213> Homo sapiens
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<400> 922  
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<210> 523
<211> 21
<212> RRT
<213> Homo sapiens
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<400> 923
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Ala Cys Leu Leu Gln
          20

```

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<210> 924
<211> 20
<212> PRT
<213> Homo sapiens
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```

<400> 924
Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg His Ala Thr Val Leu
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Thr Leu Pro Arg
      20

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```
<210> 925
<211> 37
<212> 88T
<213> Homo sapiens
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343

&lt;400&gt; 925

Phe Ile Lys Gln Leu Pro Phe Cys Arg Ser Asn Ile Leu Ser His Ser  
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 Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Asp Asp Ile Arg  
                   20                  25                  30  
 Val Asn Val Val Tyr  
                   35

&lt;210&gt; 926

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 926

Lys Thr Val Leu Gly Leu Thr Arg Gln Ala Gln Ala Lys  
                   5                  10

&lt;210&gt; 927

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 927

Val His Arg Phe Ser Lys Arg Arg Asp Ser  
                   5                  10

&lt;210&gt; 928

&lt;211&gt; 22

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 928

Lys Thr Lys Glu Ile Arg Gln Arg Ile Leu Arg Leu Phe His Val Ala  
                   5                  10                  15

Thr His Ala Ser Glu Pro  
                   20

&lt;210&gt; 929

&lt;211&gt; 3245

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 929

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3245

&lt;210&gt; 938

&lt;211&gt; 1479

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 938

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&lt;210&gt; 931

&lt;211&gt; 1476

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 931

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&lt;210&gt; 932

&lt;211&gt; 492

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 932

346

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 50 55 60  
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 65 70 75 80  
 Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val  
 85 90 95  
 Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys  
 100 105 110  
 Cys Ser Asn Ser Gly Ile Gln Cys Asp Ser Ser Gly Thr Cys Ile Asn  
 115 120 125  
 Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp  
 130 135 140  
 Glu Asn Arg Cys Val Arg Leu Tyr Gly Ser Asn Phe Ile Leu Gln Val  
 145 150 155 160  
 Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp  
 165 170 175  
 Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn  
 180 185 190  
 Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser  
 195 200 205  
 Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys  
 210 215 220  
 Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg  
 225 230 235 240  
 Cys Ile Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile  
 245 250 255  
 Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser  
 260 265 270  
 Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro  
 275 280 285  
 Glu Trp Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn  
 290 295 300  
 Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met  
 305 310 315 320  
 Phe Tyr Gly Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn  
 325 330 335  
 Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln  
 340 345 350  
 Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn  
 355 360 365  
 Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp  
 370 375 380  
 Gly Ala Thr Gln Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala  
 385 390 395 400  
 Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr  
 405 410 415  
 Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly  
 420 425 430  
 Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser  
 435 440 445  
 Lys Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly  
 450 455 460

347

Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe  
 465 470 475 480  
 Thr Asp Trp Ile Tyr Arg Gln Met Arg Ala Asp Gly  
 485 490

<210> 933  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 933  
 Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu  
 5 10 15  
 Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val  
 20 25 30  
 Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro  
 35 40 45  
 Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val  
 50 55 60  
 Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys  
 65 70 75 80  
 Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val  
 85 90 95  
 Gly Ala Ala Leu  
 100

<210> 934  
 <211> 393  
 <212> PRT  
 <213> Homo sapiens

<400> 934  
 Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys Cys Ser Asn  
 5 10 15  
 Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn Pro Ser Asn  
 20 25 30  
 Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp Glu Asn Arg  
 35 40 45  
 Cys Val Arg Leu Tyr Gly Ser Asn Phe Ile Leu Gln Val Tyr Ser Ser  
 50 55 60  
 Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp Asn Glu Asn  
 65 70 75 80  
 Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn Asn Phe Tyr  
 85 90 95  
 Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser Phe Met Lys  
 100 105 110  
 Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys Leu Tyr His  
 115 120 125  
 Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg Cys Ile Ala  
 130 135 140  
 Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile Val Gly Gly  
 145 150 155 160  
 Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser Leu His Val  
 165 170 175  
 Glu Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro Glu Trp Ile  
 180 185 190

348

```

Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn Pro Trp His
    195                200                205
Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met Phe Tyr Gly
    210                215                220
Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn Tyr Asp Ser
    225                230                235                240
Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln Lys Pro Leu
    245                250                255
Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn Pro Gly Met
    260                265                270
Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp Gly Ala Thr
    275                280                285
Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala Lys Val Leu
    290                295                300
Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr Asp Asn Leu
    305                310                315                320
Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly Asn Val Asp
    325                330                335
Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser Lys Asn Asn
    340                345                350
Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly Cys Ala Lys
    355                360                365
Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe Thr Asp Trp
    370                375                380
Ile Tyr Arg Gln Met Arg Ala Asp Gly
    385                390

```

```

<210> 935
<211> 22
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> PCR Primer

```

```

<400> 935
gtgctgtgagg agtcccccgg gc                22

```

```

<210> 936
<211> 36
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> PCR Primer

```

```

<400> 936
cgtgaactcg agtcattaga ttaacctcgt ggagcg                36

```

```

<210> 937
<211> 22
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> PCR Primer

```

349

<400> 937  
gtgctgtggg agtccccggg gc

22

<210> 938  
<211> 1158  
<212> DNA  
<213> Homo sapiens

<400> 938  
catatgcagc atcaccacca tcaccaagtg ctgtgggagt ccccgccgca gtgcagcagc 60  
tggacacattt gcgagggcctt ttgctggctg ctgctgctgc ccgtcatgct actcatcgta 120  
gccccccggg tgaagctcgc tgccttccct acctccttaa gtgactgcca aacgccacc 180  
ggcttggattt gctctgggta tgatgcaga gaaatgata tcttctcttg tgacaccaac 240  
ccctgtaaat ttgatgggga atgtttaaga attggagaca ctgtgacttg cgtctgtcag 300  
ttcaagtgc acaatgacta tgtgocctgt tgggctcca atggggagag ctaccagaat 360  
gagtgttacc tgcgacaggc tgcctgcaaa cagcagagtg agatacttgt ggtgtcagaa 420  
ggatcatgtg ccacagatgc aggatcagga tctggagatg gagtccatga aggtcttggg 480  
gaaactagtc aaaaaggagac atccacctgt gataattgcc agtttgggtc agaattgtac 540  
gaagatgcgg aggatgtctg gtgtgtgtgt aatattgact gttctcaaac caacttcaat 600  
ccccctctgc cttctgatgg gaaatcttat gataatgcct gccaatcaa agaagcatcg 660  
tgtcagaaac agggagaatt tgaagtcctg tctttgggtc gatgtcaaga taacacacct 720  
acaactacta agtctgaaga tgggcattat gcaagaacag attatgcaga gaatgctaac 780  
aaattagaag aaagtgcacg agaacaccac ataccttgtc cggaaacatta caatggcttc 840  
tgcctgcctg ggaagtgtga gcattctatc aatatgcagg agccatcttg caggtgtgat 900  
cctggttata ctggacaaca ctgtgaaaaa aaggactaca gtgttctata cgttgttccc 960  
ggtoctgtac gatttcagta tgtcttaate gcagctgtga ttggaacaat tcagattgct 1020  
gtcatctgtg ttgtggtcct ctgcattaca aggaatgcc ccagaagcaa cagaattcac 1080  
agacagagcg aaatatcagg gcactacagt tcagacaata caacaagagc gtccacgagg 1140  
ttaatctaat gactcgag

<210> 939  
<211> 1920  
<212> DNA  
<213> Homo sapiens

<400> 939  
atgcagcctc accaccatca ccacgaetgc caaacgccca cgggctggaa ttgctctggt 60  
tatgatgaca gagaanaatga tctcttctct tgtgacacca acacctgtaa atttgatggg 120  
gaatgtttta gaattggaga cactgtgact tgcgtctgtc agttcaagtg caacaatgac 180  
tatgtgcctg tgtgtggctc caatggggag agctaccaga atgagtgtta cctgcgacag 240  
gctgcctgca aacagcagag tgagataact gtggtgtcag aaggatcatg tgcacagat 300  
gcaggatcag gatctggaga tggagtccat gaaggctctg gagaactag tcaaaaggag 360  
acatccacct gtgatatttg ccagtttggg gcagaatgtg acgaagatgc cagagatgtc 420  
tgggtgtgtg gtaatatgtg ctgttctcaa accaacttca atccctctg cgttctgat 480  
gggaaatctt atgataatgc atgccaaatc aaagagcat cgtgtcagaa acaggagaaa 540  
attgaagtcn tgtctttggg tcatgttcaa gataacacaa ctcaactac taagtctgaa 600  
gatgtgcatt atgcagaac agattatgna gagaatgcta acaaataga agaaagtgc 660  
agagaacacc acataccttg tccggaacat tacaatggct tctgcctgca tgggaagtgt 720  
gagcattcta tcaatatgca ggagccatct tgcaggtgtg atgctgttga tactggacaa 780  
cactgtgaaa aaaggacta cagtgttcta taegtgttcc cgggtctgt acgatttcag 840  
tatgtcttaa tgcagctgt gattggaaca attcagattg ctgtcatctg tgtggtggtc 900  
ctctgcattc caaggaaatg ccccgagagc aacagaatcc acagacagaa gcaaaataca 960  
gggcactaca gttcagacaa tacaacaaga gcgtccacga ggttaatcta atgactcgag 1020

<210> 940  
<211> 336

350

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 940

```

Met Gln His His His His His His Asp Cys Gln Thr Pro Thr Gly Trp
      5      10      15
Asn Cys Ser Gly Tyr Asp Asp Arg Glu Asn Asp Leu Phe Leu Cys Asp
      20      25      30
Thr Asn Thr Cys Lys Phe Asp Gly Glu Cys Leu Arg Ile Gly Asp Thr
      35      40      45
Val Thr Cys Val Cys Gln Phe Lys Cys Asn Asn Asp Tyr Val Pro Val
      50      55      60
Cys Gly Ser Asn Gly Glu Ser Tyr Gln Asn Glu Cys Tyr Leu Arg Gln
      65      70      75      80
Ala Ala Cys Lys Gln Gln Ser Glu Ile Leu Val Val Ser Glu Gly Ser
      85      90      95
Cys Ala Thr Asp Ala Gly Ser Gly Ser Gly Asp Gly Val His Glu Gly
      100      105      110
Ser Gly Glu Thr Ser Gln Lys Glu Thr Ser Thr Cys Asp Ile Cys Gln
      115      120      125
Phe Gly Ala Glu Cys Asp Glu Asp Ala Glu Asp Val Trp Cys Val Cys
      130      135      140
Asn Ile Asp Cys Ser Gln Thr Asn Phe Asn Pro Leu Cys Ala Ser Asp
      145      150      155      160
Gly Lys Ser Tyr Asp Asn Ala Cys Gln Ile Lys Glu Ala Ser Cys Gln
      165      170      175
Lys Gln Glu Lys Ile Glu Val Met Ser Leu Gly Arg Cys Gln Asp Asn
      180      185      190
Thr Thr Thr Thr Thr Lys Ser Glu Asp Gly His Tyr Ala Arg Thr Asp
      195      200      205
Tyr Ala Gln Asn Ala Asn Lys Leu Glu Glu Ser Ala Arg Glu His His
      210      215      220
Ile Pro Cys Pro Glu His Tyr Asn Gly Phe Cys Met His Gly Lys Cys
      225      230      235      240
Glu His Ser Ile Asn Met Gln Glu Pro Ser Cys Arg Cys Asp Ala Gly
      245      250      255
Tyr Thr Gly Gln His Cys Glu Lys Lys Asp Tyr Ser Val Leu Tyr Val
      260      265      270
Val Pro Gly Pro Val Arg Phe Gln Tyr Val Leu Ile Ala Ala Val Ile
      275      280      285
Gly Thr Ile Gln Ile Ala Val Ile Cys Val Val Val Leu Cys Ile Thr
      290      295      300
Arg Lys Cys Pro Arg Ser Asn Arg Ile His Arg Gln Lys Gln Asn Thr
      305      310      315      320
Gly His Tyr Ser Ser Asp Asn Thr Thr Arg Ala Ser Thr Arg Leu Ile
      325      330      335

```

&lt;210&gt; 941

&lt;211&gt; 381

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 941

```

Met Gln His His His His His Val Leu Trp Glu Ser Pro Arg Gln
      5      10      15
Cys Ser Ser Trp Thr Leu Cys Glu Gly Phe Cys Trp Leu Leu Leu Leu
      20      25      30

```

351

```

Pro Val Met Leu Leu Ile Val Ala Arg Pro Val Lys Leu Ala Ala Phe
    35          40          45
Pro Thr Ser Leu Ser Asp Cys Gln Thr Pro Thr Gly Trp Asn Cys Ser
    50          55          60
Gly Tyr Asp Asp Arg Glu Asn Asp Leu Phe Leu Cys Asp Thr Asn Thr
    65          70          75          80
Cys Lys Phe Asp Gly Glu Cys Leu Arg Ile Gly Asp Thr Val Thr Cys
    85          90          95
Val Cys Glu Phe Lys Cys Asn Asn Asp Tyr Val Pro Val Cys Gly Ser
    100          105          110
Asn Gly Glu Ser Tyr Gln Asn Glu Cys Tyr Leu Arg Gln Ala Ala Cys
    115          120          125
Lys Gln Glu Ser Glu Ile Leu Val Val Ser Glu Gly Ser Cys Ala Thr
    130          135          140
Asp Ala Gly Ser Gly Ser Gly Asp Gly Val His Glu Gly Ser Gly Glu
    145          150          155          160
Thr Ser Gln Lys Glu Thr Ser Thr Cys Asp Ile Cys Gln Phe Gly Ala
    165          170          175
Glu Cys Asp Glu Asp Ala Glu Asp Val Trp Cys Val Cys Asn Ile Asp
    180          185          190
Cys Ser Gln Thr Asn Phe Asn Pro Leu Cys Ala Ser Asp Gly Lys Ser
    195          200          205
Tyr Asp Asn Ala Cys Gln Ile Lys Glu Ala Ser Cys Gln Lys Gln Glu
    210          215          220
Lys Ile Glu Val Met Ser Leu Gly Arg Cys Gln Asp Asn Thr Thr Thr
    225          230          235          240
Thr Thr Lys Ser Glu Asp Gly His Tyr Ala Arg Thr Asp Tyr Ala Glu
    245          250          255
Asn Ala Asn Lys Leu Glu Glu Ser Ala Arg Glu His His Ile Pro Cys
    260          265          270
Pro Glu His Tyr Asn Gly Phe Cys Met His Gly Lys Cys Glu His Ser
    275          280          285
Ile Asn Met Gln Glu Pro Ser Cys Arg Cys Asp Ala Gly Tyr Thr Gly
    290          295          300
Gln His Cys Glu Lys Lys Asp Tyr Ser Val Leu Tyr Val Val Pro Gly
    305          310          315          320
Pro Val Arg Phe Gln Tyr Val Leu Ile Ala Ala Val Ile Gly Thr Ile
    325          330          335
Gln Ile Ala Val Ile Cys Val Val Val Leu Cys Ile Thr Arg Lys Cys
    340          345          350
Pro Arg Ser Asn Arg Ile His Arg Gln Lys Gln Asn Thr Gly His Tyr
    355          360          365
Ser Ser Asp Asn Thr Thr Arg Ala Ser Thr Arg Leu Ile
    370          375          380

```

&lt;210&gt; 942

&lt;211&gt; 45

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 942

ctgctgcgca acggcagaat gccacacgtg ctgcagtgcg tgaac

45

&lt;210&gt; 943

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 943

Leu Leu Ala Asn Gly Arg Met Pro Thr Val Leu Gln Cys Val Asn  
5 10 15



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